City of Santa Rosa
Amended 2020 Water Shortage Contingency Plan

JOINTLY PREPARED BY

City of Santa Rosa

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LIST OF ACRONYMS AND ABBREVIATIONS

2016 LHMP	2016 Local Hazard Mitigation Plan
AF	Acre-Feet
AFY	Acre-Feet Per Year
AMI	Advanced Metering Infrastructure
AWIA	America's Water Infrastructure Act
AWSDA	Annual Water Supply and Demand Assessment
CII	Commercial, Industrial, and Institutional
City	City of Santa Rosa
CWC	California Water Code
DDW	Division of Drinking Water
DWR	Department of Water Resources
EKI	EKI Environment and Water, Inc.
EUP	Excess Use Penalties
FEMA	Federal Emergency Management Agency
FY	Fiscal Year
GSA	Groundwater Sustainability Agency
GPCD	Gallons Per Capita Per Day
GSP	Groundwater Sustainability Plan

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MOU	Memorandum of Understanding
Restructured Agreement	Restructured Agreement for Water Supply dated June 2006
RRA	Risk and Resilience Assessment
SCADA	System Control and Data Acquisition
SGMA	Sustainable Groundwater Management Act
Shortage Methodology	Water Shortage Allocation Methodology
Shortage Plan	Water Shortage Contingency Plan
Sonoma Water	Sonoma County Water Agency
WSC	Water Shortage Charge
WUE	Water Use Efficiency
UWMP	Urban Water Management Plan

1.0 INTRODUCTION

1.1 Summary of Amendments to the 2020 Water Shortage Contingency Plan

This Amended 2020 Shortage Plan was adopted by the Santa Rosa City Council on November 30, 2021 to revise the original 2020 Shortage Plan adopted by City Council on June 8, 2021. The revisions include updates to the Excess Use Penalty (EUP) structure and revisions to the water demand offset requirements for new construction. Minor changes were made to the draft Resolution in Appendix D and draft Ordinance in Appendix E and public noticing attachments in Appendix F. Appendix G includes the signed City Council adoption resolution.

Excess Use Penalties

As described in Section 5.2.8 of the Shortage Plan, customers that use more than their allocation are subject to Excess Use Penalties (EUP). The EUP is also shown in Table 5-2, Table 5-3, Table 9-3, Table 9-5, Appendix B, and Appendix C of the current Shortage Plan.

The EUP structure adopted in June 2020, which is expressed as a percentage of the water usage rate with the water shortage charge, is shown here in Table 1-1.

Table 1-1: Prior Excess Use Penalty Structure

Shortage Stage	Demand Reduction Goal	EUP 101 – 150 percent over consumption limit	EUP Over 150 percent of consumption limit
Stage 5	30 percent	10 percent	20 percent
Stage 6	40 percent	25 percent	50 percent
Stage 7	50 percent	40 percent	80 percent
Stage 8	Over 50 percent	50 percent	100 percent

The Amended Shortage Plan revises the EUP structure and uses a defined penalty amount per thousand-gallon unit, rather than a percentage of use exceeding the water allocation. This appears in Section 5.2.8, Table 5-2, Table 5-3, Table 9-3, Table 9-5, Appendix B, and Appendix C. The changes are summarized in Table 1-2.

Table 1-2: Amended Excess Use Penalty Structure

Excess Use Over Allocation in thousand-gallon units (TGALs)	Penalty per TGAL			
	Stage 5	Stage 6	Stage 7	Stage 8
2 to 10	$ 5.00	$10.00	$20.00	$40.00
Over 10	$10.00	$20.00	$40.00	$80.00

Water Demand Offsets

The Shortage Plan as adopted in June 2021 states in Section 5.2.3.3 that construction must offset new water demand in Stages 5 through 8, when existing customers are assigned water allocations (water rationing). The offset requirement varies according to the stage of shortage and is included in Table 5-3, Table 5-4, Appendix B, and Appendix C. The offset requirements adopted in June 2020 are shown in Table 1-3.

Table 1-3 – Prior Water Demand Offset Requirement for New Construction

Shortage Stage	Offset Required
Stage 5	100% offset (1:1)
Stage 6	200% offset (2:1)
Stage 7	300% offset (3:1)
Stage 8	400% offset (4:1)

The Amended Shortage Plan revises the offset requirement to maintain a consistent 1:1 ratio, as reflected in Section 5.2.3.3, Table 5-3, Table 5-4, Appendix B, and Appendix C, as shown in Table 1-4.

Table 1-4: Amended Water Demand Offset for New Construction

Shortage Stage	Offset Required
Stages 5 - 8	100% offset (1:1)

1.2 Overview of the Amended 2020 Water Shortage Contingency Plan

The City of Santa Rosa (City) Water Shortage Contingency Plan (Shortage Plan) is a detailed operational plan that documents how the City will respond to a variety of water shortage scenarios. The Shortage Plan establishes protocols for triggering City-wide water supply shortage levels, implementing corresponding demand reduction strategies to respond to actual supply conditions, and ensures the strategic management of a short- or long-term water shortage event.

A water shortage may occur due to a variety of potential scenarios, such as drought, climate change, regulatory constraints, natural or human caused disasters, and catastrophic events which may occur at any time. The Shortage Plan is the City's operating manual that allows the City Council, staff, and the public to identify and efficiently implement pre-determined steps to manage a water shortage.

Trigger points for determining water shortage conditions on the Russian River system are determined by the Sonoma County Water Agency (Sonoma Water) and water shortage provisions for the Sonoma Water system are governed by the Restructured Agreement for Water Supply dated June 2006 (Restructured Agreement). The contractual provisions of the Restructured Agreement dictate how water supply reductions will be administered by Sonoma Water in the event of a water shortage. For the City and the other parties to the Restructured Agreement, the shortage provisions are defined in Section 3.5 of that agreement and are further defined in the Water Shortage Allocation Methodology (Shortage

Methodology), which was adopted by the Sonoma Water Board in April 2006. The Restructured Agreement Section 3.5 provisions, and the Shortage Methodology, are designed to take the demand hardening associated with water conservation into account. The City continues to implement aggressive water conservation programs and has one of the lowest per capita water uses among all the Sonoma Water's Water Contractors.

The City's first Shortage Plan was adopted by Santa Rosa's City Council on February 11, 1992, in response to emergency legislation, California Assembly Bill 11X. The Shortage Plan has been updated periodically, at a minimum every five years as part of the City's Urban Water Management Plan as required by State law. Legislation has changed the requirements of water shortage contingency planning several times since the initial bill was passed. The current requirements are in Section 10632 of the California Water Code, the Urban Water Management Planning Act, which is provided as Appendix A to this Shortage Plan.

The City's 1992 Shortage Plan was revised in 1996 with updated demand and financial data. In 2002, the City completed a comprehensive revision with updates to the demand projections, financial analysis, rate structure for each rationing stage, and rationing methodology for per capita allocations and landscape allocations. In 2005, the City updated the demand and financial data for its Shortage Plan. In 2006, the City added two sections to the document addressing minimum water supply during drought and emergency planning actions. In 2010, the revision included updates to the demand projections, financial analysis, and per capita allocations, and the City added a new rationing stage. In 2015 the City updated the demand projections and financial analysis, added two new rationing stages, and revised the water allocations in those stages.

The City's Shortage Plan updates the long-term demand projections, financial analysis, rationing stages (including one additional stage), and per capita allocations in rationing stages. The City also added new elements to the Shortage Plan as required by new State regulations enacted in response to the recent statewide drought.

The City prepared this Shortage Plan on a calendar year basis, with the calendar year starting on January 1 and ending on December 31 of each year. The City reports water volumes in units of acre-feet (AF) and acre-feet per year (AFY) in this plan. The City's reporting methods for this 2020 Urban Water Management Plan (UWMP) are summarized in Table 1-1.

Table 1-1. Agency Identification (DWR Table 2-3)

Type of Supplier (select one or both)	
☐	Supplier is a wholesaler
☑	Supplier is a retailer
Fiscal or Calendar Year (select one)	
☑	UWMP Tables are in calendar years
☐	UWMP Tables are in fiscal years
If using fiscal years provide month and date that the fiscal year begins (mm/dd)	
Units of measure used in UWMP (select from drop down)	
Unit	AF
NOTES:	

The Shortage Plan includes the following sections:

1. **Introduction** provides a basic overview of the plan.
2. **Water Service Reliability Assessment** summarizes key elements of the water supply reliability analysis conducted for the City's 2020 Urban Water Management Plan and discussed primarily in its Chapters 4, 6, and 7.
3. **Annual Water Supply and Demand Assessment Procedures** outlines the process that the City will use to conduct assessments each year to determine if a shortage exists or is anticipated and provides written decision-making steps for any subsequent actions.
4. **Water Shortage Stages** describes the City's eight water shortage levels and illustrates how these align with the State's six standard water shortage levels.
5. **Shortage Response Actions** describes the shortage response actions the City will implement for each shortage level and estimates the extent these actions will address the gap between supplies and demand.
6. **Communication Protocols** explains the procedures that the City will use to inform customers, the public, and government entities of any current or predicted water shortages and associated response actions.
7. **Compliance and Enforcement** details the means the City will use to ensure compliance and enforcement of triggered shortage response actions and describes appeal and exemption procedures.
8. **Legal Authorities** describes the legal authorities that will empower the City's implementation of shortage response actions during water shortage emergencies.
9. **Financial Consequences of Shortage Conditions** provides a discussion of the potential revenue reductions and expense increases associated with activating shortage response actions and describes the City's mitigation actions.
10. **Monitoring and Reporting Program** summarizes how the City will assure appropriate data is collected to monitor customer compliance and to respond to any state reporting requirements.
11. **Procedures for Reevaluating and Improving the Shortage Plan** describes steps the City will take to assess the functionality of the Shortage Plan and make appropriate adjustments as may be warranted.
12. **Plan Adoption, Submittal, and Availability** outlines how the City will adopt, submit, implement, and amend (if necessary) the Shortage Plan, and how the City will make it publicly available.

2.0 WATER SERVICE RELIABILITY ASSESSMENT

This section relies on the water supply planning analysis and reliability findings from the City's 2020 UWMP. The discussion below includes a summary of the City's existing and projected water use (from Chapter 4 of the City's 2020 UWMP), existing and planned water supplies by source (from Chapter 6 of the City's 2020 UWMP), and the water supply reliability assessment for 2025-2045 and the Drought Risk Assessment for 2021-2025 (from Chapter 7 of the City's 2020 UWMP).

The City is a retail provider of both potable water and non-potable water, which are served by different water sources and have separate distribution systems. The City's potable water supply consists of surface

water purchased from Sonoma Water and groundwater from City wells; both sources meet or exceed all state and federal standards for drinking water. The City's non-potable water supply consists of tertiary treated disinfected recycled water, which is municipal wastewater that has been treated to a specified quality to enable it to be used for non-potable (non-drinking water) applications such as urban landscape irrigation. The City does not distribute other types of non-potable water to its customers, such as untreated groundwater, remediated groundwater, or untreated surface water. The analysis summarized in this section examines each water source separately and aggregates the information into a comprehensive picture of the City's current and future water supply reliability.

2.1 Water Use Characterization

The following section provides information about past, current, and projected water use through 2045 in five-year increments and estimated annual water use for 2021-2025 for the Drought Risk Assessment.

2.1.1 Past and Current Water Use

The City's recent historic (2015-2019) and current (2020) use of water is summarized in Table 2-1. Due to a number of atypical conditions, this water use might not reflect normal use.

Drought conditions affected water use in 2014-2016. Lingering effects of that drought and devastating urban-wildland interface fires in 2017 and 2019 and a wet, mild weather year in 2018 likely affected 2017-2019 water use.

Water use in 2020 appears to have been impacted by the COVID-19 pandemic and by warm, dry weather conditions. Shelter-in-place orders went into effect in the County of Sonoma on March 17, 2020 and remained in place for the duration of the year, becoming more or less restrictive as the number of cases rose and fell. Overall, water deliveries for 2020 were 8 percent higher than 2019, including a 13 percent increase in residential use (Single Family and Multi-Family sectors combined). Some portion of this increase is likely attributable to an increase in residential irrigation due to record low rainfall in the 2019-2020 water year and higher than normal temperatures resulting in net evapotranspiration being 27 percent above the ten-year average. This also drove up Dedicated Irrigation use by 12 percent. Conversely, the Commercial, Industrial, and Institutional sectors combined showed a 7 percent decrease in use, probably due to public health restrictions. The largest decrease was a 17 percent decline in use by the Institutional sector, likely due to closure of schools, religious facilities, and a shift to telecommuting by government agencies during the pandemic.

Table 2-1. Historic (2015-2019) and Current (2020) Water Use, AF

	2015	2016	2017	2018	2019	2020
Potable	16,539	16,938	17,895	17,689	17,832	19,277
Non-potable (recycled)	122	116	133	128	126	110
Total	**16,661**	**17,054**	**18,028**	**17,817**	**17,958**	**19,387**

2.1.2 Projected Water Use Through 2045

The long-term water demand analysis is provided in five-year increments through 2045. It includes a realistic prediction of future potable and non-potable (recycled) water use based on the City's past and current use, combined with considerations of anticipated trends in water use, population growth,

employment projections, new development, land use planning data, plumping code information, new regulations, and climate change. The demand projections consider all customer sectors as well as authorized unbilled uses (for activities such as firefighting and line flushing) and water losses from the potable water system (real loss from the distribution system and apparent loss due to things such as billing errors). Potable water demands also include water use projections for lower income residential demands.

The total projections have been adjusted to account for anticipated "passive" water savings which result from new and existing plumbing codes and local ordinances which help reduce water use. In addition to analyzing the passive savings, an analysis of the potential "active" potable water savings was conducted. The assessment of active water savings focused on customer participation in the City's water use efficiency programs. To be conservative, the City did not reduce its long-term demand projections to adjust for anticipated active water savings.

The City offsets a small percentage (less than one percent) of its total potable water demand using non-potable recycled water for urban landscape irrigation with a total of 32 service connections (not all of which are active every year). Although the City may expand the recycled water delivery system in the future if needed and if funding is available, the City does not have plans to expand its urban recycled water system during the planning horizon of this UWMP.

Average use of recycled water for the past ten years (2011-2020) was 120 AFY. The City does not project an increase in demand for recycled water in the urban setting through 2045, other than allowing for a potential increase in demand up to a total of 140 AFY at existing sites to adjust for possible impacts of climate change.

Under contract with the City, EKI Environment and Water, Inc. (EKI) completed a detailed demand analysis which is provided in Appendix E of the City's 2020 UWMP. The City's projected water demand in five-year increments through 2045 is provided in Table 2-2.

Table 2-2. Projected Water Demand 2025-2045, AF [(a)]

	2025	2030	2035	2040	2045 (Opt)
Potable	21,520	22,943	23,512	24,189	24,957
Non-potable (recycled)	140	140	140	140	140
Total	21,660	23,083	23,652	24,329	25,097

Source: 2020 UWMP DWR Table 4-3

(a) Water suppliers must span a 20-year planning horizon in their UWMPs. Santa Rosa has chosen to use a 25-year horizon through 2045 for its 2020 UWMP.

2.1.3 Estimated Water Use for Drought Risk Assessment

To complete the newly required Drought Risk Assessment, the City estimated annual water use for 2021 through 2025 at "unconstrained" levels. Unconstrained refers to anticipated water use under normal water year conditions when the City is not experiencing a water shortage. To estimate unconstrained demand for 2021-2025, the City considered historic water use and the projected demand for 2025. The 2025 projection

considers estimated population and employment growth, likely new development, rebounding demand after the 2014-2016 drought, passive water savings from plumbing codes, and climate change impacts.[1]

The anticipated increase in use from 2019 actual demand to 2025 projected demand was considered in order to estimate water use for 2021, 2022, 2023, and 2024. Non-potable (recycled) water use for 2021-2025 was estimated at 140 AFY. The City has no plans to expand the recycled water system in the urban setting for the foreseeable future. Therefore, demands for urban recycled water for 2021-2025 have been projected based on average use for 2011-2020 (120 AFY) adjusted to 140 AFY to allow for possible impacts of climate change.

The 2021-2025 water use estimates shown in Table 2-3 provide a realistic representation of demand under normal conditions, without drought and without any water shortage measures in place to reduce use. These estimates are used to evaluate the reliability of the City's water supplies if a drought were to occur over the next five years.

Table 2-3. Estimated Water Use 2021-2025 for Drought Risk Assessment, AF

	2021 Estimated[(a)]	2022 Estimated[(a)]	2023 Estimated[(a)]	2024 Estimated[(a)]	2025 Projected[(b)]
Potable	19,075	19,659	20,261	20,881	21,520
Non-potable (recycled)[(c)]	140	140	140	140	140
Total	**19,215**	**19,799**	**20,401**	**21,021**	**21,660**

(a) Estimated water demand for 2021-2024 was based on allocating the difference between actual use in 2019 and projected demand for 2025.

(b) Projected water use from DWR Table 4-3 in 2020 UWMP.

(c) The City has no plans to expand the urban recycled water system or number of customers served within the existing system. Average use for existing customers over the past 10 years was 120 AFY and is not anticipated to exceed 140 AFY in the future.

2.2 Water Supply Characterization

The following section assesses the historic and current water supplies for each of its sources. It provides long-term supply projections for 2025-2045 in five-year increments under varying hydrologic conditions (normal year, single dry year, and dry five-year periods), and estimated annual supplies for 2021 through 2025 for the Drought Risk Assessment.

2.2.1 Sources of Water Supply

The City has three existing sources of water supply:

- Purchased water: Potable water purchased under contract from Sonoma Water
- Groundwater: Potable water from the City's two production wells
- Recycled water: Non-potable water from the Santa Rosa Regional Water Reuse System

[1] City of Santa Rosa 2020 Urban Water Management Plan Water Demand Analysis and Water Conservation Measures Update, Final, EKI, November 2020.

Purchased Water: The City receives approximately 95 percent of its potable water supply from Sonoma Water under the provisions of the Restructured Agreement for Water Supply (Restructured Agreement), which was executed in June 2006. Sonoma Water's primary source of supply is the Russian River. Sonoma Water holds appropriative water rights to Russian River and Dry Creek water by virtue of an assignment to Sonoma Water of Sonoma County's portion of the 1949 application to the State of California for the Coyote Valley Dam Project appropriative water rights, and Sonoma Water's 1960 application for the Warm Springs Dam Project appropriative water rights. The combined limit on Sonoma Water's annual Russian River diversions under its water rights permits (Permit Nos. 12947A, 12949, 12950, and 16596) is currently 75,000 AFY, with a maximum diversion rate of 180 cubic feet per second.

Sonoma Water also has three groundwater wells that provide water supply. They are located near the Laguna de Santa Rosa and feed directly into Sonoma Water's Russian River-Cotati Intertie Pipeline. Sonoma Water estimates the future production capacity of these wells at 2,300 AFY.

The Restructured Agreement defines the City's annual entitlement as 29,100 AFY and stipulates an average of 40.0 million gallons per day (mgd) from Reach 1, 2, and 3a of the Intertie Aqueduct, 40.0 mgd from the Santa Rosa Aqueduct, 4.0 mgd from the Sonoma Aqueduct, or a maximum combined average total of 56.6 mgd for a one-month period from all aqueducts. The Restructured Agreement is dated June 23, 2006 and remains in effect until June 30, 2040.

Section 3.5 of the Restructured Agreement contains supply shortage provisions, which are further defined in the Shortage Methodology, which was adopted by the Sonoma Water Board in April 2006. Both Section 3.5 of the Restructured Agreement and the Shortage Methodology consider demand hardening associated with water conservation. Because the City has implemented an aggressive water conservation program over the past 30 years, it has one of the lowest per capita water uses among all of Sonoma Water's customers. This is recognized by the Shortage Methodology, which encourages water conservation. Under the Shortage Methodology, if Sonoma Water's surface water rights and Russian River supply remain limited to 75,000 AFY and the Water Contractors' total demands reach Sonoma Water's 75,000 AFY available supply, then the City's allocation during a shortage would still be 29,100 AFY, the City's full entitlement under the Restructured Agreement.

Groundwater: The City produces approximately five percent of its potable water supply from groundwater wells. The City is located within the Santa Rosa Plain sub-basin of the Santa Rosa Valley Groundwater Basin, located at the confluence of the Santa Rosa, Bennett, and Rincon Valleys. Neither the Santa Rosa Valley Groundwater Basin, nor any of its sub-basins, are adjudicated groundwater basins. This basin and its sub-basins have not been identified as overdrafted basins and are not anticipated to become overdrafted basins.

In 2014, the State Legislature passed the Sustainable Groundwater Management Act (SGMA), requiring the formation of a Groundwater Sustainability Agency (GSA) and preparation of a Groundwater Sustainability Plan (GSP) to sustainably manage groundwater supplies within California. In response to SGMA, local agencies, including the City of Santa Rosa, worked together to form the Santa Rosa Plain GSA as a public agency in June 2017.

The Department of Water Resources (DWR) identified the Santa Rosa Plain Sub-basin as a medium-priority groundwater basin that is not critically overdrafted. Pursuant to SGMA, medium priority basins must submit a GSP to DWR by January 31, 2022. The Santa Rosa Plain GSA is currently developing a GSP to evaluate, monitor, and manage the Santa Rosa Plain Sub-basin sustainably. The City is a member of the

Santa Rosa Plain GSA and will continue to participate as a member of the GSA during the preparation and implementation of the GSP.

Prior to 1960, the City relied primarily on groundwater from this sub-basin for its water supply, plus a small amount of surface water from Lake Ralphine. In June 1959, Sonoma Water began supplying surface water to the City and other Water Contractors. By the 1980s and until 2007, the City relied solely on purchased water deliveries from Sonoma Water to meet its water demands. In July 2005, the City received permission from California Department of Public Health (now Division of Drinking Water, or DDW) to use two groundwater wells (Farmers Lane Wells), formerly permitted as standby emergency wells, for full-time, active potable water supply. The Farmers Lane wells are located in the Santa Rosa Plain Sub-Basin. Groundwater trend data from the existing monitoring wells located throughout the Sub-basin indicate that water levels within the main portion of the Sub-basin have generally remained constant or have slightly increased over time, indicating that the Sub-basin is in balance and is not suffering from overdraft. This supply source is permitted for regular production of potable water. The Farmers Lane wells can provide up to 2,300 AFY.

Recycled Water: The City offsets approximately 0.7 percent of total demand for potable water in the urban system with recycled water. The City owns and operates the Santa Rosa Regional Water Reuse System (Regional System), which produces recycled water that is approved by the State for non-potable uses. Since the water recycling treatment plant opened in 1968, its volume of treated effluent water has increased from 2 mgd to an average of 22 mgd. The recycled water system is supported by storage reservoirs that can hold 1.7 billion gallons of water, which allows the system to meet peak, hot summer day irrigation requirements. Less than one percent of the recycled water produced is used within the City's urban growth boundary for landscape irrigation for 32 connections serving City facilities (including the municipal services center, bus transfer station, Finley Park, and A Place to Play sports complex), Multi-Family residential complexes, institutions, and business parks. The City is not planning to expand the urban recycled water system for the duration of the planning period of this 2020 UWMP. The Regional System provides up to approximately 140 AFY for urban recycled water customers.

2.2.2 Projected Water Supplies Through 2045

This section discusses the City's potable and non-potable water supplies available during normal conditions, single dry year conditions, and five-consecutive dry year periods for 2025 through 2045. The summary of how these years are characterized is followed by a discussion of each source of water by scenario (normal, single dry, and dry five-year periods).

The City uses the following water year definitions from the DWR *Urban Water Management Plan Guidebook 2020*.

- **Normal Year**. This condition represents the water supplies a Supplier considers available during normal conditions. This could be a single year or averaged range of years that most closely represents the average water supply available to the Supplier. DWR uses the terms average and normal interchangeably when addressing the water year type.
- **Single Dry Year**. The single dry year is the year that represents the lowest water supply available to the Supplier.
- **Five-Consecutive-Year Drought**. Per Water Code, the five-consecutive dry year period for the Drought Risk Assessment for 2021-2025 would be the driest five-year historical sequence for the Supplier (Water Code Section 10612). Suppliers may choose to use a different five-consecutive year dry period such as the lowest average water supply available

to the Supplier for five years in a row. Suppliers are encouraged to characterize the five-consecutive year drought in a manner that is best suited for understanding and managing their water service reliability.

The City has two sources of potable water: purchased water from Sonoma Water and groundwater from City wells. For these water sources, the City has identified base water years for the historical average ("normal") year, single dry year, and the driest five-year period on record. Base water years were selected based on aggregated historical information for all water supply sources and analysis by Sonoma Water.

The City has one source of non-potable water supply (recycled water). The City has been producing and using recycled water since the 1970s for agricultural use. Urban use of recycled water (for landscape irrigation) began in 2009. The City does not anticipate expanding the urban recycled water system for the foreseeable future. Assessment of non-potable recycled water supply is discussed in each scenario.

Base years and the total potable and non-potable water supply that was available during each water year type are summarized in Table 2-4. Water supply by source for each type of water year is discussed below.

Table 2-4. Basis of Water Year Data (Reliability Assessment) (DWR Table 7-1 Retail)

Year Type	Base Year If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 2019-2020, use 2020	Available Supplies if Year Type Repeats	
		☐ Quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. Location _____	
		☐ Quantification of available supplies is provided in this table as either volume only, percent only, or both.	
		Volume Available *	% of Average Supply
Average Year	2002	22,660	100%
Single-Dry Year	1977	22,660	100%
Consecutive Dry Years 1st Year	1987	22,660	100%
Consecutive Dry Years 2nd Year	1988	22,660	100%
Consecutive Dry Years 3rd Year	1989	22,660	100%
Consecutive Dry Years 4th Year	1990	22,660	100%
Consecutive Dry Years 5th Year	1991	22,660	100%

Supplier may use multiple versions of Table 7-1 if different water sources have different base years and the supplier chooses to report the base years for each water source separately. If a Supplier uses multiple versions of Table 7-1, in the "Note" section of each table, state that multiple versions of Table 7-1 are being used and identify the particular water source that is being reported in each table.

***Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.*

NOTES: Volumes are in AF.

2.2.2.1 Normal Water Year Supplies Through 2045

During normal water years, the City anticipates each of its potable and non-potable water supplies to be as follows:

Contract Water: The City's annual entitlement for contract water from Sonoma Water is 29,100 AFY per the Restructured Agreement. Sonoma Water's model projects being able to provide the City's full entitlement during normal water years through 2045.

Groundwater: In the future, it is anticipated that the City's Farmers Lane production wells may be operated as much as 40 to 70 percent of the time at a pumping rate of about 2,000 gallons per minute (gpm), which would equate to an annual pumpage quantity range of 1,550 to 2,300 AFY. This projected pumpage quantity is less than the City's maximum historical groundwater pumpage of 2,870 AFY prior to 1959 and is considered sustainable. Currently the City has no plans to add active City production wells to its municipal system. Therefore, the City projects being able produce up to 2,300 AFY of groundwater from its potable wells during normal water years through 2045.

Recycled Water: The urban recycled water system serves 32 connections and uses an average of 120 AFY (2011-2020), which is less than one percent of the total recycled water production by the Regional System. The City is not planning to expand the urban recycled water system in the foreseeable future, but it does anticipate climate change could increase existing customer demand. Urban recycled water customers are considered "non-interruptible" and have priority for recycled water deliveries. Therefore, the City projects being able to provide up to 140 AFY of non-potable water (recycled water) to urban recycled water customers through 2045.

Table 2-5 summarizes projected water supplies in normal water years through 2045.

Table 2-5. Projected Normal Year Water Supplies, AF

Source	Additional Detail	2025	2030	2035	2040	2045
Purchased or Imported Water	Potable (Contract)	29,100	29,100	29,100	29,100	29,100
Groundwater (not desalinated)	Potable (City)	2,300	2,300	2,300	2,300	2,300
Recycled Water	Non-potable (City)	140	140	140	140	140
Total	-	**31,540**	**31,540**	**31,540**	**31,540**	**31,540**

2.2.2.2 Single Dry Water Year Supplies Through 2045

During single dry water years, the City anticipates each of its potable and non-potable water supplies to be as follows:

Contract Water: As described in Sonoma Water's 2020 UWMP, Sonoma Water's model projects a supply shortfall of potable water supply during a single-dry year starting after 2025. Allocation among Sonoma Water's Water Contractors, including the City, during dry year conditions is governed by the Shortage Methodology described in Section 3.5 of the Restructured Agreement and the Shortage Methodology adopted in April 2006. Due to the City's extensive water conservation implementation, which is recognized

by the Shortage Methodology, it is not likely that single-dry year conditions would reduce the volume of contract water available to the City to less than the average for all Water Contractors. Table 2-6 shows the anticipated contract water supply during single dry year scenarios through 2045, based on projecting that Sonoma Water supply would fall short of City demand for contract water starting after 2025 as follows: 15.9 percent shortfall in 2030, 16.7 percent in 2035, and 19.0 percent in 2040, and 18.6 percent in 2045.

Groundwater: The City projects that groundwater supply would not be reduced during a single-dry year due to the short duration of a single-dry year and the historic artesian conditions of the City's Farmers Lane wells. The City projects having 2,300 AFY of potable groundwater during single dry years through 2045.

Recycled Water: The City projects non-potable (recycled) water supply would not be reduced during single-dry years. On average, the projected demand for recycled water within the City is less than one percent of the total annual recycled water production volume, and urban recycled water customers are given top priority for deliveries. The City projects having 140 AFY of recycled water during single dry years through 2045.

Table 2-6 summarizes projected water supplies in single dry water years through 2045.

Table 2-6. Projected Single Dry Year Water Supplies, AF

Source	Additional Detail	2025	2030	2035	2040	2045
Purchased or Imported Water	Potable (Contract)	20,220	18,199	18,497	18,538	19,249
Groundwater (not desalinated)	Potable (City)	2,300	2,300	2,300	2,300	2,300
Recycled Water	Non-potable (City)	140	140	140	140	140
Total		**22,660**	**20,639**	**20,937**	**20,978**	**21,689**

2.2.2.3 Dry Five-Year Period Water Supplies

During dry five-year periods, the City anticipates its potable and non-potable water supplies to be as follows:

Contract Water: As described in Sonoma Water's 2020 UWMP, Sonoma Water's model projects having less water than normal during dry five-year periods that are hydrologically equivalent to the driest five-year period on record (1987-1991) through 2045, but the City does not anticipate experiencing water shortages during such periods.

Groundwater: The City projects that groundwater supply would not be reduced during dry five-year periods. The City reviewed the volumes of groundwater extracted over the past ten years (2011-2020), including during the recent historic drought (2014-2016). Due to the quantity of groundwater storage available and the City's observation that its wells have historically always quickly returned to artesian conditions each year (even during drought conditions), the City anticipates that groundwater supply will not be reduced during dry five-year periods. The City projects having 2,300 AFY of groundwater from its potable wells during dry five-year periods through 2045.

Recycled Water: The City projects non-potable (recycled) water supply would not be reduced during single dry years. The City reviewed the volumes supplied to urban customers over the past 10 years (2011-2020), including during the recent historic drought (2014-2016). The City considered the fact that urban customers consume less than one percent of the total recycled water produced and that urban recycled water customers are given high priority for deliveries. Furthermore, the City's urban recycled water supply was not impacted during the drought conditions back to 2009 (when urban deliveries began). The City projects having 140 AFY of recycled water during dry five-year periods through 2045.

Table 2-7 summarizes projected water supplies during dry five-year periods through 2045.

Table 2-7. Multiple Dry Years Supply Through 2045, AF

Total Supplies	2025	2030	2035	2040	2045 (Opt)
First year	22,660	24,083	24,652	25,329	26,097
Second year	22,660	24,083	24,652	25,329	26,097
Third year	22,660	24,083	24,652	25,329	26,097
Fourth year	22,660	24,083	24,652	25,329	26,097
Fifth year	22,660	24,083	24,652	25,329	26,097

2.2.3 Estimated Water Supplies for Drought Risk Assessment 2021-2025

This section provides estimated potable and non-potable water supplies for the next five years (2021-2025), assuming the hydrology will be equivalent to the driest five-year period on record. These supply estimates will be used to complete a Drought Risk Assessment (DRA), which is an evaluation of the reliability of the City's water service if such a drought were to occur in the next five years. To identify the driest five-year period on record, the City relied on the analysis completed by Sonoma Water. Sonoma Water assessed its water supply for 2021-2025 assuming hydrologic conditions equivalent to the driest five-year period on record. The analysis by Sonoma Water determined this period to be 1987 through 1991.

The City assessed its potable groundwater supply availability for 2021-2025 assuming hydrologic conditions equivalent to the driest five-year period on record. The City reviewed groundwater volumes it has extracted over the past 10 years (2011-2020) for potable water supply, including groundwater use during the recent historic drought (2014-2016). The City considered the fact that its production wells were not impacted during that period and have historically consistently returned to artesian conditions quickly even after continuous full time use over seven or more dry months each year, including during the recent historic drought. The City's groundwater supply is not projected to have a shortfall in the upcoming five years. The City projects having 2,300 AFY of groundwater available.

The City assessed non-potable (recycled) water supply availability for 2021-2025 assuming hydrologic conditions equivalent to the driest five-year period on record. The projected demand for recycled water within the City (140 AFY) is less than one percent of the total recycled water production volume, and urban recycled water customers are a top priority for deliveries. During the recent historic drought (2014-2016), there was no reduction in deliveries of recycled water to urban customers. The City's source of non-potable water (recycled) is not projected to have a shortfall in the next five years. The City projects having 140 AFY of recycled water available.

The 2021-2025 water supply projections for potable and non-potable water sources are shown in Table 2-8. These projections assume the years 2021 through 2025 will be hydrologically equivalent to the driest five-year period on record (1987-1991).

Table 2-8. 2021-2025 Projected Water Supply for Drought Risk Assessment, AF[(a)]

Supply	2021	2022	2023	2024	2025
Purchased Water (potable)	20,220	20,220	20,220	20,220	20,220
Groundwater (potable)	2,300	2,300	2,300	2,300	2,300
Non-potable (recycled)	140	140	140	140	140
Total	**22,660**	**22,660**	**22,660**	**22,660**	**22,660**

(a) Assumes 2021-2025 will be hydrologically equivalent to the driest five-year period on record (1987-1991)

2.3 Water Service Reliability Findings

This section provides an analysis of the reliability of the City's water service under various scenarios. The analysis considers projected water demands discussed in Section 2.1 and planned water supplies in Section 2.2 to determine if, and when, water shortages might be anticipated. First, this section considers water service reliability through 2045 in five-year increments for normal water years, single dry water years, and dry periods lasting five consecutive years. Then, it provides water service reliability for 2021-2025 under drought conditions equivalent to the driest five-year period on record.

2.3.1 Water Service Reliability Through 2045

This section provides an analysis of the reliability of the City's water service to its customers over the planning horizon through 2045. This assessment compares projected water demands to total water supply sources for a normal water year, a single dry water year, and dry periods lasting five consecutive years. The water service reliability analysis extends through 2045 in five-year increments.

In summary, the water service reliability assessment through 2045 found the following:

- **Normal Water Years**: The City projects having adequate water supplies in normal years to meet demands through 2045.
- **Single Dry Water Years**: The City projects experiencing a shortfall in contract water supply from Sonoma Water after 2025 in any single dry year that is hydrologically equivalent to the driest water year on record (1977). However, the City does not anticipate a shortfall in groundwater supply or recycled water supply. To mitigate the shortfall in contract water supply, the City would implement its Shortage Plan to ensure demand does not exceed supply should such a shortage occur during a single dry year.
- **Dry Five-Year Periods**: The City projects having adequate water supplies during dry five-year periods to meet normal demands through 2045.
- **Drought Risk Assessment**: The City projects having adequate water supplies to meet unconstrained demands for 2021-2025, assuming the hydrology will be equivalent to the driest five-year period on record (1987-1991).

2.3.1.1 Normal Water Year

A comparison of future water supplies and projected demands shows that demands will not exceed supplies in normal water supply years through 2045, which is the planning horizon of this UWMP.

Table 2-9 provides a comparison of projected total water supply and demand during normal water years. As shown, the City anticipates having adequate water supplies in normal years to meet demands through 2045.

Table 2-9. Normal Year Supply and Demand Comparison (DWR Table 7-2)

	2025	2030	2035	2040	2045 *(Opt)*
Supply totals *(autofill from Table 6-9)*	31,540	31,540	31,540	31,540	31,540
Demand totals *(autofill from Table 4-3)*	21,660	23,083	23,652	24,329	25,097
Difference	9,880	8,457	7,888	7,211	6,443
NOTES: Volumes are in AF.					

2.3.1.2 Single Dry Water Year

As discussed in Sonoma Water's 2020 UWMP, demands for contract water could exceed supplies in a single dry year after 2025, which is within the planning horizon of 2045 for this Shortage Plan. Contract water supplied to the City could fall short of normal demand as follows: 15.9 percent shortfall in 2030, 16.7 percent in 2035, and 19.0 percent in 2040, and 18.6 percent in 2045. Because the City supplements its water supply with groundwater and recycled water sources, the shortfall in Sonoma Water would result in an overall shortage in the City's total water supply of 11 to 14 percent. To address a shortfall in contract supply during single dry years, the City would enact this Shortage Plan to reduce customer demands to align with available supplies.

A comparison of projected total water supply for all sources and demand during single-dry years is shown in Table 2-10. As needed, water shortage response actions would be taken to ensure demand does not exceed supply during water shortages. Therefore, demands have been modified in the table to reflect implementation of this Shortage Plan for 2030-2045.

Table 2-10. Single Dry Year Supply and Demand Comparison (DWR Table 7-3)

	2025	2030	2035	2040	2045 (Opt)
Supply totals [a]	22,660	20,639	20,937	20,978	21,689
Demand totals [b]	21,660	20,639	20,937	20,978	21,689
Difference	1,000	0	0	0	0
***Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.*					
NOTES: (a) Includes recycled water. (b) Reflects implementation of shortage response actions to reduce demand 11% to 14% as needed after 2025.					

2.3.1.3 Dry Five-Year Periods

A comparison of future water supplies and projected demands shows that demands will not exceed supplies in dry five-year periods through 2045, which is the planning horizon of this UWMP.

Table 2-11 provides a comparison of projected total water supply and demand during dry five-year periods. As shown, the City anticipates having adequate water supplies to meet demands through 2045.

Table 2-11. Multiple Dry Years Supply and Demand Comparison (DWR Table 7-4)

		2025*	2030*	2035*	2040*	2045* (Opt)
First year	Supply totals	22,660	24,083	24,652	25,329	26,097
	Demand totals	21,660	23,083	23,652	24,329	25,097
	Difference	1,000	1,000	1,000	1,000	1,000
Second year	Supply totals	22,660	24,083	24,652	25,329	26,097
	Demand totals	21,660	23,083	23,652	24,329	25,097
	Difference	1,000	1,000	1,000	1,000	1,000
Third year	Supply totals	22,660	24,083	24,652	25,329	26,097
	Demand totals	21,660	23,083	23,652	24,329	25,097
	Difference	1,000	1,000	1,000	1,000	1,000
Fourth year	Supply totals	22,660	24,083	24,652	25,329	26,097
	Demand totals	21,660	23,083	23,652	24,329	25,097
	Difference	1,000	1,000	1,000	1,000	1,000
Fifth year	Supply totals	22,660	24,083	24,652	25,329	26,097
	Demand totals	21,660	23,083	23,652	24,329	25,097
	Difference	1,000	1,000	1,000	1,000	1,000
Sixth year *(optional)*	Supply totals	22,660	24,083	24,652	25,329	26,097
	Demand totals	21,660	23,083	23,652	24,329	25,097
	Difference	1,000	1,000	1,000	1,000	1,000
***Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Table 2-3.*						
NOTES: Volumes are in AF. Includes recycled water.						

2.3.2 Water Service Reliability for Drought Risk Assessment

The City analyzed data and considered trends to assess whether supply shortage conditions are anticipated in one or more years during the next five years (2021-2025), assuming this period will be hydrologically equivalent to the driest five-year period on record.

Table 2-12 provides a comparison of estimated water supplies and unconstrained demands for 2021-2025 under drought conditions. As shown, the City anticipates having adequate supplies to meet unconstrained demand if 2021-2025 is hydrologically equivalent to the driest five-year period on record.

2.4 Demand Management Tools and Options

All water consumed by the City comes from local supply sources. No water is imported from other regions, nor does the City anticipate importing water from other regions throughout the UWMP planning period.

It is important to note that Sonoma Water can store 245,000 AF of water in Lake Sonoma and can divert up to 75,000 AFY for water supply purposes under current water rights permits. This means that Lake Sonoma can store approximately three years of normal water supply. While supply volumes in Table 2-10 are shown to exactly meet demands in single dry years when shortages might occur, it is anticipated that additional water would remain in storage in Lake Sonoma to meet future demands. In addition, the City's groundwater wells would only be pumped as needed to meet water use, even though the groundwater supply could produce more water.

In addition, the City's existing water management tools have increased the reliability of water supplies. By funding, staffing, and implementing water use efficiency programs for three decades, the City has helped ensure water is used wisely by customers during all water supply conditions. Details about these efforts are discussed in more detail in Chapter 9 of the City's 2020 UWMP. These programs have helped the City reduce the gallons per capita per day (gpcd) demand for potable water by 44 percent (from 177 gpcd in 1990 down to 99 gpcd in 2020), and have reduced total gross water use by 14 percent (from 22,494 AF in 1990 down to 19,277 AF in 2020). During this period (1990-2020), the City's population increased 53 percent. Going forward, the City will continue to provide ongoing water use efficiency programs. The City will also respond to water shortage conditions that may require immediate action during mild to severe drought periods or catastrophic supply interruptions by implementing this Shortage Plan.

Table 2-12. Five-Year Drought Risk Assessment Tables to Address Water Code Section 10635(b) (DWR Table 7-5)

2021	Total
Total Water Use	19,215
Total Supplies	22,660
Surplus/Shortfall w/o WSCP Action	3,445
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	3,445
Resulting % Use Reduction from WSCP action	0%
2022	**Total**
Total Water Use	19,799
Total Supplies	22,660
Surplus/Shortfall w/o WSCP Action	2,861
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	2,861
Resulting % Use Reduction from WSCP action	0%
2023	**Total**
Total Water Use	20,401
Total Supplies	22,660
Surplus/Shortfall w/o WSCP Action	2,259
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	2,259
Resulting % Use Reduction from WSCP action	0%
2024	**Total**
Total Water Use	21,021
Total Supplies	22,660
Surplus/Shortfall w/o WSCP Action	1,639
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	1,639
Resulting % Use Reduction from WSCP action	0%
2025	**Total**
Total Water Use	21,660
Total Supplies	22,660
Surplus/Shortfall w/o WSCP Action	1,000
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	
WSCP - use reduction savings benefit	
Revised Surplus/(shortfall)	1,000
Resulting % Use Reduction from WSCP action	0%
NOTE: Volumes are in AF.	

2.5 Emergency Response Planning

In addition to responding to drought conditions, the City's Shortage Plan can be used to respond to sudden conditions that interrupt water supplies to the City. Water supplies may be interrupted in the future due to a catastrophic supply interruption, area-wide power failures or shutoffs, or a natural disaster such as an earthquake.

In accordance with America's Water Infrastructure Act (AWIA), the City completed a Risk and Resilience Assessment (RRA) of its water system in 2020. The RRA systematically evaluated the City's assets, threats, and risks, and countermeasures that might be implemented to minimize overall risk to the water system. The RRA screened assets for vulnerability, including critical water system components and facilities such as storage tanks, wells, water mains, chemical tanks, water valves, pump stations, portable pumps, emergency generators, fire hydrants, and System Control and Data Acquisition (SCADA) systems. To ensure the security of the City's water system, the RRA is being retained by the City as a confidential document.

Sonoma Water's facilities are also subject to catastrophic supply interruption, area-wide power failures or shutoffs, or a natural disaster such as an earthquake. Sonoma Water facilities serving the City have backup provisions for responding to such emergencies. Additional information about Sonoma Water's emergency response and hazard mitigation plans can found it its 2020 UWMP.

In the event of an emergency such as those described below, the Water Department would respond according to the then current City of Santa Rosa Water Department Water System Emergency Response Plan.

2.5.1 Catastrophic Supply Interruption

If Sonoma Water's Russian River supply becomes contaminated (i.e., due to a chemical spill or other environmental incident), it may be possible that no water would be available from Sonoma Water for a period of time. In such a case, the City would rely on water from Sonoma Water's distribution system storage facilities and/or the City's distribution system storage facilities, the Farmers Lane wells, and/or emergency wells. If such an event were to occur, the City would also implement the corresponding stage of this Shortage Plan and immediately notify customers of the need to reduce water use until Sonoma Water's water supply is restored.

2.5.2 Area-Wide Power Failure or Shutoff

In the event of an area-wide electrical power failure or localized public safety power shutoff within the City's water service area, the City would activate stationary and/or mobile standby generators to ensure facilities have adequate power to operate. In addition, the City has numerous pumper connectors and pressure regulating valves throughout the water system to move water from different pressure zones during an emergency. During and since the devasting Tubbs Wildfire in October 2017, the City has successfully responded to dozens of public safety power shutoffs by PG&E of varying geographic scale and duration, and the City has also responded to additional wildfire events which have threatened or impacted the water system. Despite the challenges these circumstances have posed, the City has maintained water deliveries and the safe operation of its water facilities throughout each event.

2.5.3 Seismic Risk and Mitigation

Water Code Section 10632.5(a) requires that Water Shortage Contingency Plans include a seismic risk assessment and mitigation plan to assess water system vulnerabilities and mitigate those vulnerabilities.

A Local Hazard Mitigation Plan (LHMP) may be incorporated into Water Shortage Contingency Plans to address this requirement if it addresses seismic risk.

The City's 2016 Local Hazard Mitigation Plan (2016 LHMP) was adopted by the City Council on January 10, 2017 (Resolution No. RES-2017-004). The 2016 LHMP was submitted to the Federal Emergency Management Agency (FEMA), which found it in conformance with Title 44 Code of Federal Regulations Part 201.6 Local Mitigation Plans. A link to the City's 2016 LHMP has been included in Appendix H.

As discussed in the 2016 LHMP, seismic activity is a known and historic threat to the City. The Rodgers Creek fault is an active fault running through the City and its urban growth boundary. In addition, Santa Rosa's location in the San Francisco Bay Area makes the City vulnerable to regional seismic impacts.

Historically, very few earthquakes have caused damage in the City. The 1906 earthquake that notoriously impacted San Francisco also caused strong shaking impacts in Santa Rosa, stemming from a nearly 300-mile fault rupture along the San Andreas Fault. The shaking collapsed Santa Rosa City Hall and many other buildings across the City. In 1969, two earthquakes along the Healdsburg Fault (with epicenters two miles north of the City) caused some damage in Santa Rosa, including bursting City water pipelines along two creeks. In 1989, the Loma Prieto earthquake (one of the most significant earthquakes in recent history in the San Francisco Bay Area) caused ground shaking in Santa Rosa but did not damage the City's water system.

The City's proximity to active fault zones means the City will continue to face earthquake hazards into the future. The Rodgers Creek and San Andreas faults are the two most active Bay Area faults and have experienced movement within the last 150 years. According to the 2016 LHMP, some utility facilities (water, sewer, wastewater treatment, and recycled water systems) are at risk of damage from moderate to very high ground shaking events.

In accordance with AWIA, the City completed a RRA of its water system in 2020. The RRA systematically evaluated the City's assets, threats, and risks, and evaluated countermeasures that might be implemented to minimize overall risk to the system. The RRA screened assets for vulnerability, including critical water system components and facilities such as storage tanks, wells, water mains, chemical tanks, water valves, pump stations, portable pumps, emergency generators, fire hydrants, and SCADA systems. The RRA determined that some water assets are at risk of damage due to earthquakes with very strong to severe shaking. The RRA also determined that critical water assets are not located in areas considered highly susceptible to liquefaction. To ensure the security of the City's water system, the RRA and the initial seismic assessment are retained by the City as confidential documents.

In response to the 2016 LHMP and 2020 RRA, the City has been integrating the findings into its master planning processes and implementing seismic retrofit projects through its Capital Improvement Program to enhance the resiliency of the water system. Additionally, the City's facilities have been constructed in accordance with the applicable building codes to minimize potential damage during an earthquake. While some facilities may be damaged as the result of a strong earthquake, the City has planned for this potential by constructing redundancy into its water system. The City has multiple storage facilities, looped distribution pipelines, and a hose reel trailer with over 2,500 lineal feet of potable hose in various sizes with fittings to allow potentially damaged portions of the City's system to be quickly isolated and repaired as well as being able to construct manifolds for temporary emergency water stations. The City also participates in local, regional, and statewide emergency response assistance networks and mutual aid agreements.

3.0 PROCEDURES FOR ANNUAL WATER SUPPLY AND DEMAND ASSESSMENT

Beginning July 1, 2022, California Water Code (CWC) Section 10632.1 requires water suppliers to complete an Annual Water Supply and Demand Assessment (AWSDA) and submit an Annual Water Shortage Assessment Report to DWR. The first annual assessment report is due July 1, 2022. To prepare for this new requirement, water providers must include their procedures and decision-making process for conducting the AWSDA in their 2020 Water Shortage Contingency Plan.

This Shortage Plan provides the procedures for the City to conduct its AWSDA and prepare an Annual Water Shortage Assessment report to discuss the findings and recommended response actions. The procedures provided below are intended to assist the City in planning for, and responding to, potential foreseeable shortages in water supplies. These procedures provide the steps the City needs to take to complete the AWSDA and Annual Water Shortage Assessment Report, the results of which may lead to declaring a water shortage emergency and water shortage stage and implementation of the water shortage response actions detailed in this Shortage Plan.

3.1 Decision Making Process

The decision-making process described below will be used by the City to determine its water supply reliability in a consistent manner annually. The City may adjust this process as needed for improved decision-making during implementation.

Each year beginning in 2022, a team of City Water Department staff will be responsible for preparing the AWSDA and the Annual Water Shortage Assessment Report and will submit the report to DWR by July 1 of each year. The Team will include water supply planning personnel, the Deputy Director of the Water Resources Division, and any other staff or consultants as deemed necessary.

The Team will gather key data inputs described in Section 3.2 and conduct the AWSDA in accordance with Section 3.3. The Team will complete the AWSDA and develop the Annual Water Shortage Assessment Report based on an analysis of data and information. The report will include findings and make recommendations for actions, as needed. The Team will present the AWSDA and Annual Water Shortage Assessment Report to the Director of Water, or designee, for review. After this review, the AWSDA and Annual Water Shortage Assessment Report will be finalized and submitted to the Director of Water, or designee, for approval. The final approved documents will be submitted to DWR by July 1 each year.

If the AWSDA finds that available water supply will be sufficient to meet expected demands for the current year and one subsequent dry year, no further action will be required.

In the event that the AWSDA finds that available supply will not meet expected demands, the Team will prepare a resolution and ordinance (as needed) approving determinations and actions for recommendation by the Board of Public Utilities and consideration and authorization by City Council at a public hearing. The Team will also work with the City Clerk to set the date for the public hearing and meet public hearing notice requirements.

Additionally, the Team and the Director of Water, or designee, will coordinate internally across divisions and departments and externally with Sonoma Water and other local water suppliers for the possible proclamation of a local water emergency. In addition, state officials will be informed.

The AWSDA findings will be presented to the Board of Public Utilities for recommendation and then to City Council at a public hearing, along with the recommendations from the Annual Water Shortage Assessment Report. Recommended actions may include declaration of a water shortage emergency, declaration of a water shortage stage, authorization of water shortage response actions, and/or other actions as needed.

The City Council will conduct a duly noticed public hearing, determine if a water shortage condition exists, and, as needed, declare a water shortage emergency and corresponding water shortage stage, and authorize water shortage response actions.

After City Council acts, the City will implement the water shortage responses as recommended by the Board of Public Utilities and authorized by City Council, and will report monthly, or as required, to State and local officials and stakeholders.

The City will follow the approximate timeline and proposed activities as shown on Table 3-1 for conducting the assessment, and Table 3-2 for its decision making. The intent of the proposed schedules and list of activities is to provide a guideline for effectively meeting the State's requirements for assessing and reporting an existing and/or anticipated water shortage condition, and to assess and respond to shortage conditions in a coordinated and timely manner. The start and end dates and the activities shown in the tables are approximate and may be adjusted as needed.

Table 3-1. Proposed Schedule of Assessment Activities (Subject to Change)

Start Date	End Date	Activities	Responsible Party
Jan 1	Jul 1	Convene Team.	Team
Jan 1	Jan 31	Plan for water demands for current year and one subsequent dry year. Describe demand types and quantities considering factors affecting supply as described in Section 3.2 . Provide demand projections to Sonoma Water.	Team
Feb 1	Apr 30	Plan for water supply sources for current year and one subsequent dry year. Describe sources and quantities considering factors affecting supply as described in Section 3.2. • Review monthly updated Sonoma Water draft water supply assessment starting February 1 and provide comments. Receive final assessment from Sonoma Water by April 30. • Assess local water supply sources for current year and one subsequent dry year.	Team
May 1	May 15	Using the methodology described in Section 3.3, calculate the City's water service reliability for the current year and one subsequent dry year.	Team
May 1	May 15	Complete the AWSDA.	Team

Table 3-2. Proposed Schedule of Decision-Making Activities (Subject to Change)

Start Date	End Date	Activities	Responsible Party
May 15	May 30	Based on determinations of AWSDA, prepare the Annual Water Shortage Assessment Report with recommendations on water shortage condition determination and response actions. Submit to Director, or designee, for review.	Team
Jun 1	Jun 15	Review AWSDA and Annual Water Shortage Assessment Report and provide comments as needed.	Director of Water
Jun 1	Ongoing as needed	Coordinate interdepartmentally, with the region's water service provider, and with County for the possible proclamation of a local emergency.	Team and Director of Water
Jun 15	June 30	Finalize and approve AWSDA and Annual Water Shortage Assessment Report.	Team and Director of Water
Jul 1	Jul 1	Submit approved Annual Water Shortage Assessment Report to the State.	Team
As needed	As needed	If a shortage exists, prepare City Council resolution and ordinance (as needed) approving determinations and actions. • Schedule public hearing and meet requirements for public notification. • Present AWSDA findings and Annual Water Shortage Report recommendations to Board of Public Utilities for recommendation, and at City Council public hearing, along with resolution and ordinance (as needed) approving determinations and response actions. • Council to conduct public hearing, consider the findings and recommendations, and act on resolution (and ordinance as needed) to declare a water emergency and water shortage stage, and authorize water shortage response actions for implementation. • Implement the Shortage Plan response actions as recommended by the Board of Public Utilities and authorized by City Council. REPORT MONTHLY, OR AS REQUIRED, TO STATE OFFICIALS.	Team, Director of Water, Board of Public Utilities, City Council, Outreach Team, and Water Use Efficiency Section

3.2 Key Data Inputs

The AWSDA requires the evaluation of supply and demands for the current year and one dry year that is assumed to follow the current year. The following key data inputs will be used to evaluate the City's water supply reliability.

Planned water supplies will be used as input to the AWSDA for the current year and the following one dry year. In planning for water supplies, the following factors are considered:

1. Hydrological conditions
2. Regulatory conditions
3. Contractual constraints

4. Surface water and groundwater quality conditions
5. Infrastructure capacity constraints or changes
6. Capital improvement projects implementation
7. Supply availability and/or production issues

Planned water supply sources and quantities will be described and will be reasonably consistent with the supply projections in the City's adopted UWMP Chapter 6 (Water Supply Characterization) and based on updated modeling by Sonoma Water each year for contract water. Should the supply sources and projections deviate significantly from projections, an explanation for the difference will be provided.

Planned unconstrained water demands will be used as inputs to the AWSDA for the current year and the following one dry year. Unconstrained water demands are customer demands where no water conservation measures are in effect. In planning for water demands, the following factors are considered:

1. Weather conditions
2. Water year type
3. Population changes
4. Anticipated new demands
5. Pending policy changes that may impact demands
6. Infrastructure operations

Planned water demands types and quantities will be described and be reasonably consistent with the demand projections in the City's adopted UWMP Chapter 4 (Water Use Characterization). Should the demand projections deviate significantly from projections, an explanation for the difference will be provided.

3.3 Assessment Methodology

In preparing the AWSDA, the City will use the following methodology and evaluation criteria to assess the agency's water supply reliability for the current year and following one dry year.

The City will use a spreadsheet to plan for current year and future year demands. Planned supply for each water source and estimated demand inputs described in Section 3.2 will be entered in the spreadsheet in annual increments.

Projected supplies will be compared to demands to determine the reliability of the City's water supply in the current year and one subsequent dry year. The City's water supply will be determined to be reliable if water supply is sufficient to meet the planned water demands for the current and subsequent year. If unconstrained demands exceed water supply in the current year and/or one subsequent dry year, the water supply will be determined to have an existing or anticipated water shortage condition.

3.3.1 Water Supply Forecast for the Annual Assessment

Planned water supply sources and quantities will be described and will be reasonably consistent with the supply projections in the City's adopted UWMP Chapter 6 (Water Supply Characterization) for each water supply source and based on updated modeling by Sonoma Water each year for contract water. Should the supply sources and projections deviate significantly from projections, an explanation for the difference will be provided. The City may adjust its water supply projections as needed to account for hydrological

conditions, regulatory conditions, contractual constraints, water quality conditions, infrastructure capacity constraints or changes, capital improvement project implementation, or other issues.

3.3.2 Unconstrained Customer Demand for the Annual Assessment

The term "unconstrained customer demand" refers to anticipated customer water needs for the year, prior to any water shortage response actions that might be necessary to ensure demand does not exceed supply.

Estimated unconstrained water demands will be reasonably consistent with the projections in the City's adopted UWMP Chapter 4 (Water Demand Characterization). Should the demand estimates deviate significantly from projections, an explanation for the difference will be provided. The City may adjust its customer demand forecast as needed to account for factors such as weather, population changes, anticipated new demands, prior year conditions, infrastructure operations, and other factors pertinent to land use and customer patterns.

3.3.3 Planned Water Use Current Year Considering Dry Subsequent Year for Annual Assessment

The City will evaluate how anticipated water supplies for the coming year will be used, while assuming the subsequent year will be a dry year. This assessment will be informed by the factors that affect the availability and management of all water supplies under varying hydrologic and regulatory conditions, unique water rights or contract provisions, and infrastructure risks.

3.3.4 Infrastructure Considerations for Annual Assessment

The City will evaluate how infrastructure capabilities and constraints may affect the City's ability to deliver supplies to meet expected water use needs in the coming year. This will include consideration of anticipated capital projects that may influence capabilities, such as repairs that may constrain capabilities or new projects that may add capacity.

3.3.5 Other Factors for Annual Assessment

The City will describe any locally appropriate factors that can influence or disrupt supplies, along with other unique local considerations that are considered as part of the AWSDA.

3.4 Adoption of the Annual Assessment Each Year

Each year beginning in 2022, the City will conduct the AWSDA and develop the Annual Water Shortage Assessment Report, as outlined above, to determine whether a water shortage exists or is anticipated in the current and/or one subsequent dry year.

The AWSDA and Annual Water Shortage Assessment Report will be presented to the Director of Water, or designee, for review and approval. The approved report will then be submitted to DWR by July 1 each year.

If the AWSDA finds that available water supply will be adequate to meet expected demands for the current year and one subsequent dry year, no further action will be required.

If the AWSDA finds that available supply will not meet expected demands, the City will present the findings and recommendations to the Board of Public Utilities for recommendation and then to the City Council at a public hearing, along with a resolution and ordinance (as needed) approving the findings and response actions. After City Council acts, the City will implement the authorized water shortage response actions.

4.0 WATER SHORTAGE STAGES

Recent updates to Water Code section 10632 (a)(3) indicate that Shortage Plans must include standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40 and 50 percent shortages and greater than 50 percent shortage. The Water Code allows water suppliers to use their own water shortage levels provided they include a narrative or graphic describing the relationship of their water shortage levels to the standard water shortage levels prescribed by the Water Code.

To allow for a more refined response to water shortages, the City's Shortage Plan includes eight shortage levels rather than the State's standard six levels. Section 4 describes the shortage response actions to be implemented during each water shortage level to address the water supply gap.

In normal water supply circumstances, the City meets its anticipated customer water demand with 100 percent available supply. If the City determines that its normally available supply is reduced by up to 10 percent, it will implement Stage 1 of this Shortage Plan, which includes locally appropriate response actions to address the water supply gap. The same shortage considerations apply to the remaining water shortage levels, including Stage 2 (11-15 percent shortage), Stage 3 (16-20 percent shortage), Stage 4 (21-25 percent shortage), Stage 5 (26-30 percent shortage), Stage 6 (31-40 percent shortage), Stage 7 (41-50 percent shortage) and Stage 8 (over 50 percent shortage).

Table 4-1 summarizes the City's eight water shortage levels.

Table 4-1. City's Water Shortage Contingency Plan Levels

Shortage Level	Complete Both	
	Percent Shortage Range[(a)] Numerical value as a percent	Water Shortage Condition (Narrative description)
1	Up to 10%	Voluntary - 10% reduction in use communitywide
2	Up to 15%	Mandatory - 15% reduction in use communitywide
3	Up to 20%	Mandatory - 20% reduction in use communitywide
4	Up to 25%	Mandatory - 25% reduction in use communitywide
5	Up to 30%	Mandatory - 30% reduction in use, with water allocations assigned to each customer
6	Up to 40%	Mandatory - 40% reduction in use, with water allocations assigned to each customer
7	Up to 50%	Mandatory - 50% reduction in use, with water allocations assigned to each customer
8	Over 50%	Mandatory - more than 50% reduction in use, with water allocations assigned to each customer
(a) One stage in the Water Shortage Contingency Plan must address a water shortage of 50 percent.		

The State now requires water providers to indicate how their water shortage levels compare to the State's standard six stages for shortages. The State's standard stages include Stage 1 up to 10 percent, Stage 2 up to 20 percent, Stage 3 up to 30 percent, Stage 4 up to 40 percent, Stage 5 up to 50 percent, and Stage 6 over 50 percent. The City wishes to have more flexibility in less severe shortages. Therefore, while the State's second stage includes shortages up to 20 percent, the City provides for two corresponding stages (Stage 2 up to 15 percent and City Stage 3 up to 20 percent) to tailor the local response to shortage conditions. This is also true for the State's third stage up to 30 percent; the City split this into two stages, with Stage 4 including shortages up to 25 percent and Stage 5 up to 30 percent.

Table 4-2 illustrates how the City's eight water shortage stages align with the State's six standard stages.

Table 4-2. City Water Shortage Levels Cross Referenced to State Standard Water Shortage Levels

City Water Shortage Levels	Percent Shortage Range	Water Shortage Condition	State Standard Water Shortage Levels	
Stage 1[(a)]	up to 10%	Up to 10% reduction in water supply	Stage 1[(a)]	up to 10%
Stage 2	11-15%	11-15% reduction in water supply	Stage 2	up to 20%
Stage 3	16-20%	16-20% reduction in water supply		
Stage 4	21-25%	21-25% reduction in water supply	Stage 3	up to 30%
Stage 5	26-30%	26-30% reduction in water supply		
Stage 6	31-40%	31-40% reduction in water supply	Stage 4	up to 40%
Stage 7	41-50%	41-50% reduction in water supply	Stage 5	up to 50%
Stage 8	Over 50%	Over 50% reduction in water supply	Stage 6	over 50%
(a) Stage 1 is voluntary.				

5.0 SHORTAGE RESPONSE ACTIONS

This Shortage Plan provides for a broad range of shortage response actions for reducing water use and managing demands as needed during water shortages. Specific actions differ depending on the severity of the shortage level and the anticipated water use reduction impact of each action.

5.1 Supply Augmentation

The City may find that, under certain conditions, its contract water supply is reduced catastrophically and suddenly. In this situation, the City may activate its production wells (if not already in use). Under normal water conditions, the City's production wells provide water supply during dry, peak demand irrigation months (typically April through October). If these production wells were to be activated during non-irrigation months, this would be an augmentation of water supply. The City may also activate its standby wells to augment emergency water supply.

5.2 Demand Reduction Actions

Demand reduction strategies will be employed at all stages of a water shortage emergency. Consumption reduction methods include:

- Public information campaign
- Programs to help customers reduce water use
- Water use restrictions and prohibitions
- Water Waste Patrols
- Locally appropriate operational changes
- Water shortage rates
- Water allocations
- Excess use penalties

The shortage response actions for each water shortage level are described below, with a corresponding estimate of the extent the action will address the gap between supplies and demands in Section 4.4.

5.2.1 Public Information Campaign

During water shortages of any level, the City will implement an information campaign to inform customers, officials, water suppliers, and interested parties about the water shortage, the water use reduction target, actions customers can take to help achieve the water use reduction target, assistance the City can provide its customers, and water use prohibitions and restrictions. A comprehensive communication plan is detailed in Section 6 of this Shortage Plan.

During each drought experienced by the City to date, public outreach and education efforts have proven to be extremely effective in achieving water reduction targets to ensure demand does not exceed supply. The City's public information campaigns during past water shortages have been designed to help customers understand and implement measures to reduce water use by eliminating water waste, reducing nonessential uses, conserving water, and participating in the City's Water Use Efficiency Programs. Although the City has not experienced a supply shortage since 1976-77, the City has adopted voluntary demand reduction Resolutions as a conservative measure during several droughts over the years. Each time, the community has quickly reduced water use in response to the public information campaign.

5.2.2 Programs to Help Customers Reduce Water Use

The City's water conservation outreach campaigns have been very successful in the past, in large part because the City provides a suite of services, programs, resources, rebates, and incentives to help customers avoid water waste, reduce nonessential uses, conserve water, and improve water use efficiency.

The City began implementing water conservation measures during the 1976-1977 drought. In the early 1990s, the City expanded its efforts with the creation and hiring of a full-time Water Conservation Coordinator. In 1998 the City became a signatory to the California Urban Water Conservation Council (now the California Water Efficiency Partnership) Memorandum of Understanding Regarding Urban Water Conservation (MOU). The City was recognized by the *Public Officials for Water and Environmental Reform 2007 Water Conservation Scorecard* as one of only two water retailers in the State of California to successfully complete all 14 best management practices as outlined in the MOU, without an exemption.

Since 1998, the City has spent over $21 million (Water Department and grant funding) on its water conservation programs, including replacement of approximately 56,000 toilets with ultra-low-flow and high-efficiency toilets and the replacement of over 3.5 million square feet of high-water use landscapes with low water use landscapes. Additionally, the City implements innovative programs such as its rainwater harvesting rebate program, graywater reuse ("laundry-to-landscape") rebate program, hot

water recirculation pump incentive, and sustained reduction rebate program. The City's cumulative water conservation implementation has resulted in sustained water use savings of approximately 7,100 AFY, and a 44 percent reduction in per capita use (compared to 1990).

Santa Rosa is committed to integrating water conservation into current and future supply and demand solutions for both the water system and the recycled water system. Currently, the City implements the following demand management measures and best management practices under all water supply conditions to help the City and its customers use water wisely in all sectors (residential, commercial, industrial, institutional, and large landscape irrigation):

- Full time water conservation program coordination and staffing
- Distribution system water loss auditing and water loss controls
- Enforcement of its Water Waste Ordinance
- Metering and monthly billing of all water customers
- Conservation pricing and rate structure
- Public education and outreach
- Free fixtures (such as high efficiency faucet aerators and showerheads)
- Technical assistance and site evaluations
- Incentives and rebates

Additional details regarding the City's conservation efforts can be found in the City's 2020 UWMP in Chapter 9 Demand Management Measures.

5.2.3 Water Use Prohibitions and Restrictions

In addition to any state-mandated prohibitions and the City's Water Waste Ordinance, the City has established prohibitions for each water shortage stage. Compliance and enforcement procedures are discussed in Section 6 of this Shortage Plan.

5.2.3.1 Water Waste Ordinance

The City adopted a Water Waste Ordinance in 1999, which is in effect at all times during normal and shortage conditions. The Ordinance includes provisions for the following:

- Prohibits waste of water due to breaks or leaks in the water delivery system or water use in outdoor areas resulting in runoff.
- Requires all new water services using evaporative cooling systems, decorative water fountains, conveyer car washes, and industrial clothes washers to be equipped with water recycling or reuse systems.
- Provides the City the authority to discontinue service if the water waste is not corrected.

The City typically receives reports of potential water waste violations from a range of sources, such as the general public, the City's Water Waste Patrols (discussed in Section 5.2.4), other City staff, automated Advanced Metering Infrastructure (AMI) alerts of continuous use, automated billing system alerts of unusually high use during a billing cycle, and/or automated or manual review of customer use data and water allocations. Section 7 provides a detailed discussion of compliance and enforcement procedures for water waste and other violations of the Shortage Plan provisions which occur during water shortages.

5.2.3.2 Restrictions on Water Features

In compliance with the Water Code Section 10632(b), the City provides separate restrictions on water use for swimming pools and spas from restrictions on other water features, such as decorative water features and ornamental fountains. These water use restrictions are called out separately in this Shortage Plan.

5.2.3.3 Prohibitions and Restrictions by Shortage Stage

The City has the following prohibitions which go into effect during specific water shortage conditions.

Stage 1

- The Water Waste Ordinance remains in effect.
- Potable water may not be used for washing hard surfaces unless required for public health and safety (e.g., sidewalks, driveways, and patios).
- Hose end nozzles are required.

Stage 2

- Prohibitions and restrictions from Stage 1 are in effect.
- Restaurants may only serve water upon request.
- Hotel and lodging industry must incorporate appropriate signage and/or messaging regarding washing of linens only upon request.

Stages 3

- Prohibitions and restrictions from Stages 1-2 are in effect.
- Pressure washing with potable water (except for public health and safety) is prohibited unless a variance is obtained from the Water Department.
- Landscape irrigation is limited to the hours of 8 PM to 6 AM.

Stage 4

- Prohibitions and restrictions from Stages 1-3 are in effect.
- Filling and operation of decorative water features and ornamental fountains is prohibited.

Stage 5

- Prohibitions and restrictions from Stages 1-4 are in effect.
- Filling of new swimming pools and spas is prohibited.
- Recycled water must be used for construction dust control if it is available and a filling station is within one mile of the construction site.
- New construction must offset new demand by a ratio of 1 to 1.

Stage 6

- Prohibitions and restrictions from Stages 1-5 are in effect.
- Filling or topping of existing swimming pools and spas is prohibited.
- Installation of landscaping at new construction is prohibited.
- ~~New construction must offset new demand by a ratio of two to one.~~

Stage 7

- Prohibitions and restrictions from Stages 1-6 are in effect.
- Installation or replanting of any landscaping is prohibited.
- ~~New construction must offset new demand by a ratio of three to one.~~

Stage 8

- Prohibitions and restrictions from Stages 1-7 are in effect.
- Landscape irrigation is prohibited.
- ~~New construction must offset new demand by a ratio of four to one.~~

5.2.4 Water Waste Patrols

During a water shortage of any level, the City will implement pro-active water waste patrols to identify and inform customers about violations of the Water Waste Ordinance (e.g., water running off a site due to over-irrigation or broken irrigation equipment) and/or violations of other irrigation restrictions (limiting irrigation to the hours of 8PM to 6AM in Stages 3 through 7 and prohibition against all irrigation in Stage 8). Water Waste Patrol efforts may include physical patrols in vehicles as well as "patrols" using AMI data to monitor for compliance. The frequency and scope of Water Waste Patrols will increase or decrease as needed, depending on the time of year, weather conditions, and shortage level restrictions in place. When a violation has been observed by the Water Waste Patrol, the customer will be notified and offered technical assistance, recommendations, and information on incentive and rebate programs to help the customer correct the violation. Section 7 provides a detailed discussion of compliance and enforcement procedures.

5.2.5 Locally Appropriate Operational Changes

During a water shortage of any level, the City may elect to implement operational measures to support implementation of the Shortage Plan. This may include hiring temporary workers, reassigning staff, and/or increasing overtime to provide staffing for a range of efforts, such as conducting Water Waste Patrols, implementing the communication protocols, responding to customer service requests, scheduling and conducting site assessments and consultations, processing incentive and rebate applications, and conducting compliance and enforcement efforts. The City may also elect to limit water main flushing and restrict potable water use for fire department drills. Operational changes will be considered at each level of water shortage to determine whether and when to implement such measures.

5.2.6 Water Shortage Charge

During water shortage Stages 2 through 8, the Water Shortage Charge (WSC) will be implemented to encourage customers to reduce water use commensurate with the water shortage target and to help the City recover a portion of the cost of the revenue from the shortfall from the entire community. If a customer reduces water use consistent with the water shortage target, their water bill will not significantly change (relative to standard rates with normal usage) even after the water usage rates are increased by the WSC. See Section 8 for a discussion of the financial analysis used to set the WSC for each Stage.

Under normal water supply conditions and in shortage Stage 1, the then-current water rate structure remains in place. Beginning in Stage 2, a WSC of 5 percent will be added to the customer usage rates on every unit of water sold for all customer services. The WSC will increase to 7.5. percent in Stage 3, 10 percent in Stage 4, 15 percent in Stage 5, 25 percent in Stage 6, 35 percent in Stage 7, and finally 45 percent in Stage 8. In addition, beginning in Stage 5 and continuing through Stage 8, the tiered water

usage rate structure for Single Family, Duplex, and Dedicated Irrigation services is replaced by the then current uniform water usage rate applicable to Multi-Family and Commercial, Industrial, and Institutional (CII) services.

Table 5-1 summarizes the incremental changes in water rates as a function of water shortage stage. More detail is provided in Section 8.

Table 5-1. Incremental Changes in Water Rates

Stage	Water Shortage Condition	Water Shortage Charge
1	Up to 10 percent	No Water Shortage Charge
2	Up to 15 percent	5 percent of customer use rate
3	Up to 20 percent	7.5 percent of customer use rate
4	Up to 25 percent	10 percent of customer use rate
5	Up to 30 percent	15 percent of customer use rate
6	Up to 40 percent	25 percent of customer use rate
7	Up to 50 percent	35 percent of customer use rate
8	Over 50 percent	45 percent of customer use rate

5.2.7 Water Allocations

Under normal conditions and under shortage conditions in Stages 1 through 4, water services are not subject to water rationing (water allocations). In shortage Stages 5 through 8, water allocations will be assigned to each water service as follows:

Stage 5: 30 percent overall water use reduction, with mandatory allocations assigned to each water service as follows:

- Single Family services receive 40 gpcd plus a moderate landscape allocation of 2,000 gallons per month from May through October.
- Multi-Family services receive 40 gpcd plus a moderate landscape allocation if irrigation usage is not on a separate dedicated service from May through October.
- Commercial/Industrial/Institutional services receive 85 percent of the previous 12 months' usage or of the most recent 12-month period with no water shortage restrictions in place.
- Dedicated Irrigation Meter services receive a water budget based on 40 percent of historical net evapotranspiration-based demand for the square footage of the irrigated area.
- Health care and public safety services receive 95 percent of the most recent 12-month period with no water shortage restrictions in place.

Stage 6: 40 percent overall water use reduction, with mandatory allocations assigned to each water service as follows:

- Single Family services receive 36 gpcd plus a minimal landscape allocation of 1,000 gallons per month from May through October.
- Multi-Family services receive 36 gpcd plus a minimal landscape allocation if irrigation usage is not on a separate dedicated service from May through October.

- Commercial/Industrial/Institutional services receive 80 percent of the previous 12 months' usage or of the most recent 12-month period with no water shortage restrictions in place.
- Dedicated Irrigation Meter services receive a water budget based on 20 percent of historical net evapotranspiration-based demand for the square footage of the irrigated area.
- Health care and public safety services receive 90 percent of the most recent 12-month period with no water shortage restrictions in place.

Stage 7: 50 percent overall water use reduction, with mandatory allocations assigned to each water service as follows:

- Single family and Multi-Family services receive 32 gpcd.
- Commercial/Industrial/Institutional services receive 75 percent of the previous 12 months' usage or of the most recent 12-month period with no water shortage restrictions in place.
- Dedicated Irrigation Meter services receive a water budget based on 10 percent of historical net evapotranspiration-based demand for the square footage of the irrigated area, to provide water for mature trees and shrubs only.
- Health care and public safety services receive 85 percent of the most recent 12-month period with no water shortage restrictions in place.

Stage 8: Over 50 percent overall water use reduction, with mandatory allocations assigned to each service.

- Allocations shown below are for up to 60 percent mandatory reduction. However, allocations may be adjusted as needed to respond to the severity of the water shortage.
  - Single Family and Multi-Family services receive 28 gpcd.
  - Commercial/Industrial/Institutional services receive 70 percent of the previous 12 months' usage or of the most recent 12-month period with no water shortage restrictions in place.
  - Dedicated Irrigation Meter services receive no allocation.
  - Health care and public safety services receive 80 percent of the most recent 12-month period with no water shortage restrictions in place.

5.2.8 Excess Use Penalties

During any water shortage emergency stage that requires water allocations (water rationing), water use in excess of individual account water allocations is prohibited. ~~Once water allocations have been assigned in Stages 5 through 8, the~~ The City will enforce allocations with Excess Use Penalties (EUP) for water usage that exceeds the water allocation established for each water service. Section 7 discusses compliance and enforcement procedures.

The structure of the EUP is summarized in Table 5-2.

Table 5-2. Excess Use Penalty (EUP) Structure for Stages 5 - 8

Excess Use Over Allocation in thousand-gallon units (TGALs)	Penalty per TGAL			
	Stage 5	Stage 6	Stage 7	Stage 8
2 to 10	$ 5.00	$10.00	$20.00	$40.00

Over 10	$10.00	$20.00	$40.00	$80.00

The EUP is entirely avoidable by all customers. Therefore, no EUP revenues are planned for or relied upon. EUP revenues are not intended to be used as general operating revenues during the emergency but may be used to: offset the extraordinary costs of the water shortage emergency such as additional conservation support; rebuild the Catastrophic Reserve; and/or establish a rate stabilization fund for the post-emergency recovery. Section 8 includes additional discussion about the EUP.

~~In Stage 5, the EUP consists of a 10 percent penalty for use over 100 percent and up to 150 percent of the water allocation and a 20 percent penalty for use over 150 percent of the water allocation. In Stage 6, the EUP consists of a 25 percent penalty for use over 100 percent and up to 150 percent above the water allocation and a 50 percent penalty for use over 150 percent of the water allocation for all customer services. In Stage 7, the EUP consists of a 40 percent penalty for use over 100 percent and up to 150 percent above the water allocation and an 80 percent penalty for use over 150 percent of the water allocation for all customer services. In Stage 8, the EUP consists of a 50 percent penalty for use over 100 percent and up to 150 percent above the water allocation and a 100 percent penalty for use over 150 percent of the water allocation for all customer services.~~

~~The structure of the EUP is summarized in Table 5-2.~~

~~Table 5-2. Excess Use Penalty (EUP) for Water Used in Excess of Allocation in Stages 5, 6, 7, and 8~~

~~6.0 Water Use Compared to Allocation~~	~~7.0 Excess Use Penalty (EUP)~~
~~Water use up to 100 percent of allocation~~	~~No EUP~~
~~Water use over 100 percent and up to 150 percent of allocation~~	~~Stage 5 – EUP = 10 percent of Water usage rate with WSC~~ ~~Stage 6 – EUP = 25 percent of Water usage rate with WSC~~ ~~Stage 7 – EUP = 40 percent of Water usage rate with WSC~~ ~~Stage 8 – EUP = 50 percent of Water usage rate with WSC~~
~~Water use over 150 percent of allocation~~	~~Stage 5 – EUP = 20 percent of Water usage rate with WSC~~ ~~Stage 6 – EUP = 50 percent of Water usage rate with WSC~~ ~~Stage 7 – EUP = 80 percent of Water usage rate with WSC~~ ~~Stage 8 – EUP = 100 percent of Water usage rate with WSC~~

5.3 Summary of Demand Reduction Actions

Table 5-3 provides a summary of the demand reduction actions what will be used during water shortages. Each stage incorporates the prohibitions and restrictions of the previous stage. In Stage 1, the City will initiate its public information campaign (Communication Protocols discussed in Section 6) and progressively build the campaign through successive stages or as needed within a stage. Appendix B provides an expanded table showing all response actions by shortage stage.

Table 5-3. Summary of Demand Reduction Actions

Stage[a]	Water Reduction	WSC	Water Allocations	EUP[b]	Prohibitions and Restrictions
1	10%	-	-	-	Implement Communication Protocols Provide customer service and assistance Make operational changes as needed Launch Water Waste Patrols Institute prohibitions and restrictions • Water Waste Ordinance (always in effect) • Hose-end shut-off nozzles required • Prohibit washing hard surfaces with hose Conduct compliance and enforcement as needed
2	15%	5%	-	-	In addition to previous stage: • Restaurants may only serve water upon request • Hotel and lodging industry must incorporate appropriate signage and/or messaging regarding washing of linens only upon request
3	20%	7.5%	-	-	In addition to previous stages: • Prohibit pressure washing unless variance obtained • Limit irrigation to the hours of 8 PM to 6 AM
4	25%	10%	-	-	In addition to previous stages: • Prohibit operation of ornamental fountains & water features
5	30%	15%	Site Specific	See Table 5-2 ~~10% / 20%~~	In addition to previous stages: • Prohibit filling new swimming pools & spas • Require recycled water for construction dust control (if available and within 1-mile radius) • New construction must offset new demand 1:1
6	40%	25%	Site Specific	See Table 5-2 ~~25% / 50%~~	In addition to previous stages: • Prohibit filling or topping of existing swimming pools & spas • ~~Prohibit installation of water-using landscaping at new construction~~ • ~~New construction must offset new demand 2:1~~
7	50%	35%	Site Specific	See Table 5-2 ~~40% / 80%~~	In addition to previous stages: • ~~Prohibit installation or replanting of water-using landscaping~~ • ~~New construction must offset new demand 3:1~~
8	over 50%	45%	Site Specific	See Table 5-2 ~~50% / 100%~~	In addition to previous stages: • ~~Prohibit all landscape irrigation~~ • ~~New construction must offset new demand 4:1~~

(a) Stage 1 is voluntary. Stages 2-8 are mandatory.

(b) Excess Use Penalty applies to use that is 101-150% of allocation / over 150% of allocation.

5.4 Shortage Response Action Effectiveness

Table 5-4 summarizes the City's water shortage response actions with their estimated water reductions for each stage. For each action identified, the City has estimated the extent to which that action will reduce the gap between supplies and demands city-wide. The City has estimated the effectiveness of the shortage response actions based on water use reductions that have occurred historically and on expected reductions associated with implementing the Water Shortage Charge, Water Allocations, and Excess Use Penalty in more severe shortages of 30 percent or more (such shortages have not been experienced to date in Santa Rosa).

Table 5-4. Demand Reduction Actions (DWR Table 8-2)

Shortage Level	Demand Reduction Actions ***Drop down list*** *These are the only categories that will be accepted by the WUE data online submittal tool. Select those that apply.*	How much is this going to reduce the shortage gap? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? ***For Retail Suppliers Only*** *Drop Down List*
Add additional rows as needed				
1 Target: voluntary up to 10% reduction	Expand Public Information Campaign	Reduces total water use by 15-20%	Based on community response to calls for reductions over the past 30 years	No
1	Offer Water Use Surveys	Reduces total water use by less than 0.5%	Always offered. Expect increase in participation. Water savings based on 2014-2016 drought	No
1	Provide Rebates on Plumbing Fixtures and Devices	Reduces total water use by less than 0.5%	Always offered. Expect increase in participation. Water savings based on 2014-2016 drought	No
1	Provide Rebates for Landscape Irrigation Efficiency	Reduces total water use by less than 0.5%	Always offered. Expect increase in participation. Water savings based on 2014-2016 drought	No
1	Provide Rebates for Turf Replacement	Reduces total water use by less than 0.5%	Always offered. Expect increase in participation. Water savings based on 2014-2016 drought	No
1	Decrease Line Flushing	Reduces total water use by less than 0.5%	Average total annual flushing is approximately 0.5% of total water.	No

Table 5-4. Demand Reduction Actions (DWR Table 8-2)

Shortage Level	Demand Reduction Actions ***Drop down list*** *These are the only categories that will be accepted by the WUE data online submittal tool. Select those that apply.*	How much is this going to reduce the shortage gap? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? ***For Retail Suppliers Only*** *Drop Down List*
1	Increase Water Waste Patrols	Reduces total water use by less than 0.5%	Includes all water waste enforcement efforts.	Yes
1	Landscape - Restrict or prohibit runoff from landscape irrigation	Reduces total water use by less than 0.5%	Always prohibited (Water Waste Ord).	Yes
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Reduces total water use by less than 0.5%	Always prohibited (Water Waste Ord).	Yes
1	Other - Require automatic shut off nozzles on hoses	Reduces total water use by less than 0.5%	Required for garden and utility hoses	Yes
1	Other - Prohibit use of potable water for washing hard surfaces	Reduces total water use by less than 0.5%	Prohibit hosing off hard surfaces.	Yes
2 Target: up to 15% reduction	Expand Public Information Campaign	Reduces total water use by 15-20%	Based on community response to calls for reductions over the past 30 years	No
2	Other	Reduces total water use by 1-3%	Combined savings for actions continued from previous stage	Yes
2	Implement or Modify Drought Rate Structure or Surcharge	Reduces total water use by 1-5%	Water Shortage Charge (5% of customer usage rates)	Yes
2	CII - Restaurants may only serve water upon request	Reduces total water use by less than 0.5%	City offers assistance with signage	Yes
2	CII - Lodging establishment must offer opt out of linen service	Reduces total water use by less than 0.5%	City offers assistance with signage	Yes
3 Target: up to 20% reduction	Expand Public Information Campaign	Reduces total water use by 15-20%	Based on community response to calls for reductions over the past 30 years	No
3	Other	Reduces total water use by 1-3%	Combined savings for actions continued from previous stages	Yes
3	Implement or Modify Drought Rate Structure or Surcharge	Reduces total water use by 5-7%	Water Shortage Charge (7.5% of customer usage rates)	Yes

Table 5-4. Demand Reduction Actions (DWR Table 8-2)

Shortage Level	Demand Reduction Actions ***Drop down list*** *These are the only categories that will be accepted by the WUE data online submittal tool. Select those that apply.*	How much is this going to reduce the shortage gap? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? ***For Retail Suppliers Only*** *Drop Down List*
3	Other - Prohibit use of potable water for washing hard surfaces	Reduces total water use by 0-5%	Prohibit use of potable water for pressure washing.	Yes
3	Landscape - Limit landscape irrigation to specific times	Reduces total water use by 0-15%	Irrigation limited to 8pm to 6am. Savings varies based on time of year/season	Yes
4 Target: up to 25% reduction	Expand Public Information Campaign	Reduces total water use by 15-20%	Based on community response to calls for reductions over the past 30 years	No
4	Other	Reduces total water use by 3-5%	Combined savings for actions continued from previous stages	Yes
4	Implement or Modify Drought Rate Structure or Surcharge	Reduces total water use by 7-10%	Water Shortage Charge (10% of customer usage rates)	Yes
4	Water Features - Restrict water use for decorative water features, such as fountains	Reduces total water use by less than 0.5%	Prohibit operation of ornamental fountains and water features	Yes
5 Target: up to 30% reduction	Expand Public Information Campaign	Reduces total water use by 15-20%	Based on community response to calls for reductions over the past 30 years	No
5	Other	Reduces total water use by 3-5%	Combined savings for actions continued from previous stages	Yes
5	Implement or Modify Drought Rate Structure or Surcharge	Reduces total water use by 10-15%	Water Shortage Charge (15% of customer usage rates)	Yes
5	Implement or Modify Drought Rate Structure or Surcharge	Reduces total water use by 5-10%	Water Allocations in effect and enforced by Excess Use Penalty	Yes
5	Other water feature or swimming pool restriction	Reduces total water use by less than 0.5%	Prohibit filling of new pools/spas	Yes
5	Other - Prohibit use of potable water for construction and dust control	Reduces total water use by less than 0.5%	Require use of recycled water if available and filling station within one-mile radius	Yes

Table 5-4. Demand Reduction Actions (DWR Table 8-2)

Shortage Level	Demand Reduction Actions ***Drop down list*** *These are the only categories that will be accepted by the WUE data online submittal tool. Select those that apply.*	How much is this going to reduce the shortage gap? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? ***For Retail Suppliers Only*** *Drop Down List*
5	Moratorium or Net Zero Demand Increase on New Connections	Reduces total water use by 0-1%	New construction must offset demand by 1:1 ratio	Yes
6 Target: up to 40% reduction	Expand Public Information Campaign	Reduces total water use by 15-20%	Based on community response to calls for reductions over the past 30 years	No
6	Other	Reduces total water use by 3-5%	Combined savings for actions continued from previous stages	Yes
6	Implement or Modify Drought Rate Structure or Surcharge	Reduces total water use by 15-20%	Water Shortage Charge (25% of customer usage rates)	Yes
6	Implement or Modify Drought Rate Structure or Surcharge	Reduces total water use by 10-15%	Water Allocations in effect and enforced by Excess Use Penalty	Yes
6	Other water feature or swimming pool restriction	Reduces total water use by less than 0.5%	Prohibit filling or topping of existing pools/spas	Yes
6	Landscape - Prohibit certain types of landscape irrigation	Reduces total water use by less than 0.5%	Prohibit installation of water-using landscape at new construction	Yes
~~6~~	~~Moratorium or Net Zero Demand Increase on New Connections~~	~~Reduces total water use by 0-2%~~	~~New construction must offset demand by 2:1 ratio~~	~~Yes~~
7 Target: up to 50% reduction	Expand Public Information Campaign	Reduces total water use by 15-20%	Based on community response to calls for reductions over the past 30 years	No
7	Other	Reduces total water use by 3-5%	Combined savings for actions continued from previous stages	Yes
7	Implement or Modify Drought Rate Structure or Surcharge	Reduces total water use by 15-20%	Water Shortage Charge (35% of customer usage rates)	Yes
7	Implement or Modify Drought Rate Structure or Surcharge	Reduces total water use by 20-25%	Water Allocations in effect and enforced by Excess Use Penalty	Yes
7	Landscape - Prohibit certain types of landscape irrigation	Reduces total water use by less than 0.5%	Prohibit installation or replanting of any water-using landscape	Yes

Table 5-4. Demand Reduction Actions (DWR Table 8-2)

Shortage Level	Demand Reduction Actions ***Drop down list*** *These are the only categories that will be accepted by the WUE data online submittal tool. Select those that apply.*	How much is this going to reduce the shortage gap? *Include units used (volume type or percentage)*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? ***For Retail Suppliers Only*** *Drop Down List*
~~7~~	~~Moratorium or Net Zero Demand Increase on New Connections~~	~~Reduces total water use by 0-3%~~	~~New construction must offset demand by 3:1 ratio~~	~~Yes~~
8 Target: over 50% reduction	Expand Public Information Campaign	Reduces total water use by 15-20%	Based on community response to calls for reductions over the past 30 years	No
8	Other	Reduces total water use by 3-5%	Combined savings for actions continued from previous stages	Yes
8	Implement or Modify Drought Rate Structure or Surcharge	Reduces total water use by 15-20%	Water Shortage Charge (45% of customer usage rates)	Yes
8	Implement or Modify Drought Rate Structure or Surcharge	Reduces total water use by 20-25%	Water Allocations in effect and enforced by Excess Use Penalty	Yes
8	Landscape - Prohibit all landscape irrigation	Reduces total water use by 0-20%	Savings varies based on time of year/season	Yes
~~8~~	~~Moratorium or Net Zero Demand Increase on New Connections~~	~~Reduces total water use by 0-4%~~	~~New construction must offset demand by 4:1 ratio~~	~~Yes~~

6.0 COMMUNICATION PROTOCOLS

When a water shortage level is triggered by the Annual Water Supply and Demand Assessment (or for any reason), the City's Water Department will convene a Water Shortage Communication Team to work with the City's Public Information Office to gain assistance. The City will also coordinate with other local water suppliers and the Sonoma Marin Saving Water Partnership to ensure messaging and outreach efforts remain consistent with and leverage the scope and extent of regional outreach efforts.

The Water Shortage Communication Team will keep stakeholders up to date on critical issues, such as:

- Current or anticipated water shortage level
- Corresponding water use reduction target
- Prohibitions and restrictions on water use
- Shortage response actions water users can take to eliminate water waste, minimize non-essential uses, conserve water, and improve water use efficiency

- Available assistance from the City's Water Use Efficiency program such as rebates, technical assistance, site evaluations, do-it-yourself kits, workshops, free fixtures, and other resources
- Water Shortage Charge (Stages 2-8)
- Water shortage allocations (Stages 5-8)
- Excess Use Penalties (Stages 5-8)

Key stakeholders will include (at a minimum) customers and water users, the public and interested parties, City staff, Sonoma Water and local water providers, and local and state officials.

Printed and online messaging materials will be available in English and Spanish. Communication channels to reach these stakeholders will leverage a range of avenues, such as:

- Bill inserts and envelop messaging
- Letters and other direct mail (such as postcards) to customers
- Direct outreach efforts to reach target markets, such as high use customers, residential customers, and other stakeholders (e.g., property managers and landscape professionals)
- Social media posts
- Media releases
- Updated website content
- Santa Rosa's City Connections e-newsletter
- City e-gov delivery news alerts
- Ad buys: Radio, Print, Digital, and Social Media
- Presentations to City and regional policy makers and governing bodies
- Presentations to civic groups, nonprofits, businesses, large employers, schools
- Information booths at local events, fairs, festivals, etc.
- Meetings with officials and regulators and reports documenting regulatory compliance

If a water shortage occurs due to a catastrophic event (for example, earthquake, wildfire, or infrastructure failure), the City's then current emergency response communication protocols will be implemented.

Appendix C provides a table listing the shortage response actions for Stages 1 through 8 and the associated communication protocols for each shortage level.

7.0 COMPLIANCE AND ENFORCEMENT

This section describes how the City will ensure compliance with, and enforcement of, provisions of this Shortage Plan. The City's procedures include protocols for treatment of violations and actions associated with more egregious levels of violation. The procedures include appeal and exemption processes.

The City employs multiple methodologies to enforce prohibitions and restrictions on end uses identified in Table 5-4 (DWR Table 8-2) of this Shortage Plan, including exceedances of water allocations in shortage Stages 5 through 8. Primarily, the City relies on outreach and education to ensure customers are aware of

water shortage conditions and the corresponding prohibitions and restrictions that exist for the declared water shortage stage.

The City's enforcement approach is progressive to the extent feasible, starting with customer service, education, and communication programs. Customers will be notified of violations and offered technical assistance to help them come back into compliance. In response to unresolved violations, enforcement action will then include one or more written warnings. If the customer still does not comply, the City may take progressive actions such as conducting a mandatory water audit at the customer's site and ultimately shutting off water service if necessary. In addition to these actions, the City will enforce water allocations with Excess Use Penalties for customers that exceed their delineated water service allocations in Water Shortage Stages 5 through 8 according to the procedures outlined below. See Section 5 of this Shortage Plan for additional information about water allocations and the Excess Use Penalty.

7.1 Compliance and Enforcement Procedures

Customer Education: The first step for ensuring customer compliance during a water shortage will be to proactively inform customers about the water shortage condition, water use reduction target, and prohibitions and restrictions on end uses, including water service-specific water allocations described in Section 5.2.7. In addition, customers will be informed of the City's water use efficiency programs and assistance to help customers comply with the Shortage Plan. Customer education will be accomplished by implementing the Communication Plan discussed in Section 6 and detailed in Appendix C.

Reports: The City anticipates receiving reports of potential violations from a range of sources, such as the general public, the City's online reporting tool, the City's Water Waste Patrol, other City staff, automated AMI alerts of continuous use, automated billing system alerts of unusually high use during a billing cycle, and/or automated or manual review of customer use data compared to water allocations.

Investigations: When the City receives a report of a violation of prohibitions or restrictions (including water waste and irrigation malfunctions), staff will take steps to determine whether a violation occurred and whether it has been resolved. Investigative steps may include (and are not limited to) actions such as seeking additional information from reporting parties, attempting to observe the violation directly, contacting the customer to gather additional information, and/or reviewing customer water use data directly or through automated processes (for example, for water allocation exceedances in Stages 5-8). Cases that appear to violate other City codes or regulations (for example, by causing or threatening harm to property, public health and safety, creeks, etc.) will also be referred to other City staff as needed for corresponding investigation and enforcement.

Initial Notice: When following up on a customer's first violation, staff will attempt to contact the customer by phone, email, and/or by mail to inform them of the violation and compliance requirements, including the timeline for resolving the violation. In non-urgent cases, the time period for resolving the issue will be three weeks after the date of the Initial Notice. If the customer is actively working toward resolving the issue, the deadline may be extended. Staff will also offer to provide information about available City assistance and programs (to the extent relevant and feasible) which may help the customer come into compliance. The verbal and written notices are intended to serve as educational resources to inform the customers about water waste prohibitions, water use restrictions, the violation, the time period for resolving the violation, and information about available City assistance and programs.

In the case of water allocation violations, a First Warning Letter (as described below) will be sent by mail in addition to attempting to contact the customer by phone or email.

First Warning: If the violation has not been resolved within the time specified in the Initial Notice or if it is a water allocation violation, then staff will generate a First Warning letter to inform the customer of the violation and compliance requirements, including the time period for resolving the violation, and consequences for noncompliance. In non-urgent cases, the time period for resolving the issue may be extended to three weeks after the date of the First Warning letter. The First Warning letter will also encourage the customer to contact the City if they wish to learn about available technical assistance and incentive programs. The letter will include appeal and exemption processes.

Second Warning: If the violation remains unresolved within the time specified in the First Warning letter, staff will send a Second Warning letter. It will reference the dates of the Initial Notice and the First Warning Letter. It will also include the same or similar information as outlined for the First Letter, including the time period for resolving the issue and information about the consequences of noncompliance as well as appeal and exemption processes. In non-urgent cases in which the customer is making progress, the time period for resolving the issue may be extended to three weeks after the date of the Second Warning letter.

Third Warning: If the violation remains unresolved within the time specified in Second Warning letter, a Third Warning letter signed by the Director or their designee will be sent to the customer to inform them that City action is imminent if the violation is not corrected by a date certain. The letter will indicate which of these will occur: a mandatory site audit, water service shut off, and/or other enforcement action deemed appropriate by the Director of Water or their designee. Water allocation violations will be subject to the Excess Use Penalty. The letter will also indicate the dates of the Initial Notice and the First and Second Warning letters and include appeal and exemption processes. In most cases, the time period for resolving the issue may be as short as one or two days after the date of the Third Warning letter.

Urgent Cases: If at any time during an investigation or enforcement process, it is discovered that a violation appears to be urgent and warrants immediate City action, the City will seek to contact the customer directly by phone or in person to inform them of the violation, the need for immediate corrective action by a date certain, and the imminent action(s), including water service shut off, that the City will take if the violation is not resolved by that date. The Director or their designee will also provide this information in writing to the customer. In most cases, the time period for resolving the issue may be 15 or fewer days after the date of the urgent warning letter.

Multiple Violations: If a water service is found to have at least three violations within a rolling six-month period during a water shortage, enforcement may be elevated to Urgent status.

7.2 Appeal Process

If a Water customer wishes to appeal a City action taken in response to a violation, the customer may file an appeal in writing within 21 days (3 weeks) of the written notification of the violation to:

Deputy Director of Water Resources
Santa Rosa Water
69 Stony Circle
Santa Rosa, CA 95401

The Deputy Director or designee will decide on the matter within 30 calendar days of receiving the appeal. The appeal should include:

- The City action taken in response to the violation being appealed
- The street address of the subject property
- The water account number
- The water customer's name, phone number, mailing address, and, if available, email address
- An explanation of the grounds upon which the appeal is being filed
- The specific action the customer wishes the Deputy Director to take
- The appeal must be signed by the Water customer and dated

If a customer is not satisfied with the decision, an appeal may be filed within 30 days of the decision to:

Director of Santa Rosa Water
69 Stony Circle
Santa Rosa, CA 95401

The Director will decide on the matter within 30 calendar days of receiving the appeal. The Director's decision is final.

7.3 Exemption and Reassessment Process

If a Water customer wishes to request an exemption from a water use prohibition or restriction, or if a customer wishes to request a reassessment of the water allocation assigned to a Water service, the customer must file a request in writing to:

Deputy Director of Water Resources
Santa Rosa Water
69 Stony Circle
Santa Rosa, CA 95401

The Deputy Director or designee will decide on the matter within 30 calendar days of receiving the request.

The request should include:

- The prohibition, restriction, or water allocation of concern
- The street address of the subject property
- The water account number
- The water customer's name, phone number, mailing address, and, if available, email address
- An explanation of the grounds upon which the request for exemption or allocation reassessment is being requested; for example, grounds might include documentation that water use was sustainably reduced with the installation of water efficiency technology and/or equipment prior to the water shortage and/or documentation of a significant health and safety need that must be met
- The specific action the customer wishes the Deputy Director to take
- The request must be signed by the Water customer and dated

If a customer is not satisfied with the decision, a request may be filed within 30 days of the decision to:

Director of Santa Rosa Water
69 Stony Circle
Santa Rosa, CA 95401

The Director will decide on the matter within 30 calendar days of receiving the appeal. The Director's decision is final.

8.0 LEGAL AUTHORITIES

At the time of a water shortage emergency, the Santa Rosa City Council will, by resolution, declare a state of water shortage emergency and empower enactment of the Water Shortage Contingency Plan. A draft Water Shortage Emergency Resolution is found in Appendix D. With water emergencies that trigger the Water Shortage Charge rate structure (Stages 2 through 8), water allocations (Stages 5 through 8), or the Excess Use Penalty (Stages 5 through 8), the City Council will also adopt an ordinance. A draft ordinance is provided in Appendix E.

If a water shortage emergency occurs while the City Council cannot assemble to adopt a Water Shortage Emergency Resolution or Ordinance, the City Manager, or designee, is authorized to implement the appropriate stage of the Shortage Plan based on the reduction in water supply. The determination by the City Manager, or designee, to implement the Shortage Plan shall remain effective until the City Council meeting immediately following such determination, at which time the Santa Rosa City Council will consider adopting a Water Shortage Resolution or Ordinance.

The City's public water system does not provide potable water service to other cities or counties. However, if it does so in the future, the City will coordinate with any city or county within which it provides water supply services for the possible proclamation of a local emergency, as defined in Section 8558 of the Government Code.

9.0 FINANCIAL CONSEQUENCES OF WATER SHORTAGE CONTINGENCY PLAN

This section describes the potential revenue reductions and expense increases associated with activating shortage response actions and describes the City's mitigation actions. The water rate structure changes during water shortages are also necessary to help cover water system costs and protect the financial stability of the water system as water demands are reduced. In addition, changes to the water rate structure are designed to encourage customers to reduce water use commensurate with water use reduction targets.

9.1 Revenue and Expenditure Impacts

Under normal water conditions and in Stage 1 (with a voluntary community-wide water use reduction target of 10 percent), the City's water rate structure is designed to encourage efficient water use. This is achieved through a low fixed service charge and relatively high usage rates applicable to each unit of water use. This conservation-oriented rate structure introduces some financial risk in that a significant portion of fixed costs is recovered through the usage charge, based on water usage.

The City's water rate structure consists of a two-tier water rate structure for Single Family and Duplex Residential customers, a uniform water usage rate structure for Multi-Family Residential and CII customers, and a water-budget based two-tier water rate structure for Dedicated Irrigation customers. As of July 2021, the normal water usage rates per 1,000 gallons are listed in Table 9-1. The water rate structure also includes fixed monthly service charges, which vary with the size of the water meter.

Table 9-1. Water Usage Rates Effective July 2021

Customer Sector	Water Usage Rates per 1,000 Gallons
Single Family and Duplex Residential Tiered Rate	
Tier 1 (up to sewer cap)	$ 5.99
Tier 2 (above sewer cap)	$ 6.79
Single Family with No Irrigation Needs	$ 5.99
Multi-Family Residential	$ 6.33
Commercial, Industrial, & Institutional	$ 6.33
Irrigation Water-Budget Based Tiered Rate	
Tier 1 (up to 125 percent of water budget)	$ 6.09
Tier 2 (above 125 percent of water budget)	$ 7.54
Irrigation Water-Budget Based Tiered Rate (Recycled Water)	
Tier 1 (up to 125 percent of water budget)	$ 5.79
Tier 2 (above 125 percent of water budget)	$ 7.54

During water shortage emergencies, a reduction in water usage can result in revenues not covering all fixed costs. In addition, implementing triggered water shortage response actions and procedures for compliance and enforcement will lead to an increase in costs. To address this, the City has developed three approaches for its water shortage financial strategy and rate structure. They are summarized here and discussed below:

- Water customers will be subject to an increased water usage charge (Water Shortage Charge) during Stage 2 through Stage 8 to help cover water system costs, encourage water conservation, and help protect the financial condition of the water utility. The Water Shortage Charge (described below) is designed such that customers meeting use reduction goals will have lower water bills than they do with standard rates and normal usage.
- In Stages 1 through 8, Undesignated Reserves and/or the Catastrophic Reserve may be drawn down to absorb part of the financial deficit caused by a reduction in water rate revenues (due to lower water sales) and increase in costs (due to implementation of triggered water shortage actions and procedures for compliance and enforcement).
- Reductions in Capital Improvement Program expenditures can be implemented in Stage 2 through Stage 8 to offset reduced revenue resulting from decreased water sales and increased costs resulting from implementation of the Shortage Plan.

9.1.1 Water Shortage Charge and Excess Use Penalty

The Water Shortage Charge is designed to recover a portion of revenue reductions during water shortage Stages 2 through 8. The Excess Use Penalty is designed to reinforce the importance of limiting water use

to water allocations in Stages 5 through 8 and is not designed to address revenue shortfalls associated with water shortages.

9.1.2 Water Shortage Charge

Water usage rates during a shortage condition will be based on modifications to the water rate structure in place at the time of the declared emergency for all water sold in Stages 2 through 8. The Water Shortage Charge will help recover a portion of revenue shortfalls due to declining water sales and increasing costs for responding to the water shortage. The WSC is designed such that a typical customer's bill will not change significantly even though the water usage rates are increased (this assumes the typical customer will reduce water usage consistent with use reduction goals).

In Stages 2 through 8, a reduction in net revenue brought on by reduced water sales and increased costs for the water shortage response effort will be mitigated in part by the introduction of a WSC on each unit of water sold. A 5 percent WSC will be added to the then-current water usage rates on every unit of water sold for all customer services beginning in Stage 2. The WSC will increase to 7.5 percent in Stage 3, 10 percent in Stage 4, 15 percent in Stage 5, 25 percent in Stage 6, and 35 percent in Stage 7, and 45 percent in Stage 8.

Beginning in Stage 5 and continuing through Stage 8, the tiered water usage rates for Single Family Residential and Dedicated Irrigation services are eliminated and the uniform water usage rate applicable to Multi-Family Residential and CII services is imposed on all customer services. Table 9-2 illustrates incremental changes in the WSC as a function of the shortage stage.

Table 9-2. Water Shortage Charge (WSC) for All Water Sold – Stages 2 through 8

STAGE 2	
Account Type	Water Shortage Charge
Single Family and Duplex Accounts	WSC = 5 percent of Tier 1 Rate WSC = 5 percent of Tier 2 Rate
Dedicated Irrigation Accounts	WSC = 5 percent of Tier 1 Rate WSC = 5 percent of Tier 2 Rate
Multi-Family Residential Accounts (3 units or more)	WSC = 5 percent of Uniform Rate
Commercial, Industrial, Institutional, Health Care, Safety	WSC = 5 percent of Uniform Rate
STAGE 3	
Account Type	Water Shortage Charge
Single Family and Duplex Accounts	WSC = 7.5 percent of Tier 1 Rate WSC = 7.5 percent of Tier 2 Rate
Dedicated Irrigation Accounts	WSC = 7.5 percent of Tier 1 Rate WSC = 7.5 percent of Tier 2 Rate
Multi-Family Residential Accounts (3 units or more)	WSC = 7.5 percent of Uniform Rate
Commercial, Industrial, Institutional, Health Care, Safety	WSC = 7.5 percent of Uniform Rate
STAGE 4	
Account Type	Water Shortage Charge
Single Family and Duplex Accounts	WSC = 10 percent of Tier 1 Rate WSC = 10 percent of Tier 2 Rate

Table 9-2. Water Shortage Charge (WSC) for All Water Sold – Stages 2 through 8

Dedicated Irrigation Accounts	WSC = 10 percent of Tier 1 Rate WSC = 10 percent of Tier 2 Rate
Multi-Family Residential Accounts (3 units or more)	WSC = 10 percent of Uniform Rate
Commercial, Industrial, Institutional, Health Care, Safety	WSC = 10 percent of Uniform Rate
STAGE 5	
Account Type	Water Shortage Charge
Single Family and Duplex Accounts	WSC = 15 percent of Uniform Rate
Dedicated Irrigation Accounts	WSC = 15 percent of Uniform Rate
Multi-Family Residential Accounts (3 units or more)	WSC = 15 percent of Uniform Rate
Commercial, Industrial, Institutional, Health Care, Safety	WSC = 15 percent of Uniform Rate
STAGE 6	
Account Type	Water Shortage Charge
Single Family and Duplex Accounts	WSC = 25 percent of Uniform Rate
Dedicated Irrigation Accounts	WSC = 25 percent of Uniform Rate
Multi-Family Residential Accounts (3 units or more)	WSC = 25 percent of Uniform Rate
Commercial, Industrial, Institutional, Health Care, Safety	WSC = 25 percent of Uniform Rate
STAGE 7	
Account Type	Water Shortage Charge
Single Family and Duplex Accounts	WSC = 35 percent of Uniform Rate
Dedicated Irrigation Accounts	WSC = 35 percent of Uniform Rate
Multi-Family Residential Accounts (3 units or more)	WSC = 35 percent of Uniform Rate
Commercial, Industrial, Institutional, Health Care, Safety	WSC = 35 percent of Uniform Rate
STAGE 8	
Account Type	Water Shortage Charge
Single Family and Duplex Accounts	WSC = 45 percent of Uniform Rate
Dedicated Irrigation Accounts	WSC = 45 percent of Uniform Rate
Multi-Family Residential Accounts (3 units or more)	WSC = 45 percent of Uniform Rate
Commercial, Industrial, Institutional, Health Care, Safety	WSC = 45 percent of Uniform Rate

9.1.3 Excess Use Penalty

During water shortage Stages 5 through 8, water allocations are assigned to all service connections and water use in excess of individual account water allocations is prohibited. Water allocations will be enforced with the EUP for water usage that exceeds the water allocation established for each water service. The EUP provides an inclining ~~rate~~ penalty structure designed to reinforce the need for all customers to limit water use to the assigned water allocations. Customers who achieve the reduction target will not be penalized. Customers who exceed their water allocation will be subject to an EUP. See Section 7 for compliance and enforcement procedures.

The structure of the EUP is summarized in Table 9-3 (same as Table 5-2 in Section 5).

Table 9-3. Excess Use Penalty (EUP) Structure for Stages 5 - 8

Excess Use Over Allocation in thousand-gallon units (TGALs)	Penalty per TGAL			
	Stage 5	Stage 6	Stage 7	Stage 8
2 to 10	$ 5.00	$10.00	$20.00	$40.00
Over 10	$10.00	$20.00	$40.00	$80.00

Excess Use Penalties are entirely avoidable by all customers. Therefore, EUP revenues are not intended to be used as general operating revenues during the emergency and are not considered an element of the water shortage financial strategy and rate structure~~,~~ but may be used to offset the extraordinary costs of the water shortage emergency such as additional conservation support, to rebuild the Catastrophic Reserve, and/or to establish a rate stabilization fund for the post-emergency recovery.

~~In Stage 5, the EUP consists of a 10 percent penalty for use over 100 percent up to 150 percent of the water allocation and a 20 percent penalty for use over 150 percent of the water allocation for all customer services. In Stage 6, the EUP consists of a 25 percent penalty for use over 100 percent up to 150 percent above the water allocation and a 50 percent penalty for use over 150 percent of the water allocation for all customer services. In Stage 7, the EUP consists of a 40 percent penalty for use over 100 percent up to 150 percent above the water allocation and an 80 percent penalty for use over 150 percent of the water allocation for all customer services. In Stage 8, the EUP consists of a 50 percent penalty for use over 100 percent up to 150 percent above the water allocation and a 100 percent penalty for use over 150 percent of the water allocation for all customer services. The structure of the EUP is summarized in Table 9-3.~~

~~**Table 9-3. Excess Use Penalty (EUP) for Water Used in Excess of Allocation in Stages 5, 6, 7, and 8**~~

~~Water Use Compared to Allocation~~	~~Excess Use Penalty (EUP)~~
~~Water use up to 100 percent of allocation~~	~~Water usage rate with WSC~~
~~Water use over 100 percent up to 150 percent of allocation~~	~~Stage 5 – EUP = 10 percent of Water usage rate with WSC~~ ~~Stage 6 – EUP = 25 percent of Water usage rate with WSC~~ ~~Stage 7 – EUP = 40 percent of Water usage rate with WSC~~ ~~Stage 8 – EUP = 50 percent of Water usage rate with WSC~~
~~Water use over 150 percent of allocation~~	~~Stage 5 – EUP = 20 percent of Water usage rate with WSC~~ ~~Stage 6 – EUP = 50 percent of Water usage rate with WSC~~ ~~Stage 7 – EUP = 80 percent of Water usage rate with WSC~~ ~~Stage 8 – EUP = 100 percent of Water usage rate with WSC~~

9.1.4 Water Shortage Charge Rate Structure and Excess Use Penalty Structure

Table 9-4 summarizes the Stages in which the Water Shortage Charges and Excess Use Penalties first are applied.

Table 9-4. Water Shortage Contingency — Surcharges and Penalties

Water Shortage Charge – Increased usage rates to encourage water conservation and help cover costs	Takes effect in Stage 2
Excess Use Charge – Penalty for excess use above water allocations	Takes effect in Stage 5

Table 9-5 summarizes the Water Shortage Charge rate structure and the Excess Use Penalty structure for each water shortage stage based on the current (effective July 2021) water rates.

Table 9-5. Water Shortage Rate Structures - July 2021[(a)]

	Normal Water Usage Rates[(b)]	Water Use Reduction Ranges[(c)]						
		Stage 2 11% to 15%	Stage 3 16% to 20%	Stage 4 21% to 25%	Stage 5 26% to 30%	Stage 6 31% to 40%	Stage 7 41% to 50%	Stage 8 Over 50%
Water Shortage Charge[(d)]	-	5%	7.5%	10%	15%	25%	35%	45%
Excess Use Penalties[(e)]	-	-	-	-	Penalty based on amount of use over allocation (per thousand-gallon unit)			
Water Usage Rates ($/1,000 gallons)								
Single Family and Duplex Accounts								
Tier 1	$5.99	$6.29	$6.44	$6.59	-	-	-	-
Tier 2	$6.79	$7.13	$7.30	$7.47	-	-	-	-
Single Family with No Irrigation Needs								
All water use	$5.99	$6.29	$6.44	$6.59	-	-	-	-
Multi-Family/Comm./Indus./Inst.								
All water use	$6.33	$6.65	$6.80	$6.96	-	-	-	-
Irrigation (potable water)								
Tier 1	$6.09	$6.39	$6.55	$6.70	-	-	-	-
Tier 2	$7.54	$7.92	$8.11	$8.29	-	-	-	-
Irrigation (recycled water)								
Tier 1	$5.79	$6.08	$6.22	$6.37	-	-	-	-
Tier 2	$7.54	$7.92	$8.11	$8.29	-	-	-	-
All Water Customers								
Water use up to 100% of water allocation	-	-	-	-	$7.28	$7.91	$8.55	$9.18
Excess Use Penalties for use over allocation	-	-	-	-	Penalty based on amount of use over allocation (per thousand-gallon unit) [(e)]			

(a) Water shortage charges and excess use penalties are expressed as percentages applied to normal water usage rates. Monthly service charges are unaffected by the water shortage rates and charges. The normal water usage rates shown herein are the water usage rates proposed for July 2021 and are used for illustrative purposes.
(b) Applies to normal water conditions and Stage 1 water shortages.
(c) Stages 2 through 8 are mandatory water reduction stages.
(d) When the water use reduction goal exceeds 10 percent, the normal water usage rates are increased by the water shortage charge percentage shown. The water shortage charge increment provides supplemental revenue to help bridge the financial deficit created by shortage conditions.
(e) Penalties are shown in Table 5-2 and Table 9-3.

Table 9-6 details the City's projected annual revenue and expenditure status (based on a normalized budget and water supply/demand condition for Fiscal Year (FY) 21-22) in non-shortage (normal supply) conditions and at each stage in the water shortage program.

Customers who reduce their water use consistent with declared water use reduction goals should expect to see a decrease in the water portion of their monthly utility bill.

Table 9-6. Impact of Water Shortage on Revenues and Expenditures With Proposed Water Shortage Strategy (FY 21-22)[a]

	Water Use Reduction Ranges								
	Normal Supply[a]	Stage 1 Up to 10%	Stage 2 11% to 15%	Stage 3 16% to 20%	Stage 4 21% to 25%	Stage 5 26% to 30%	Stage 6 31% to 40%	Stage 7 41% to 50%	Stage 8 Over 50%
Modeled Water Use Reduction -->	0%	10%	15%	20%	25%	30%	40%	50%	60%
Water Sales (AF) -->	17,511	15,760	14,884	14,009	13,133	12,258	10,507	8,756	7,004
Sources of Funds									
Service Charge Revenue	$12,099,000	$12,099,000	$12,099,000	$12,099,000	$12,099,000	$12,099,000	$12,099,000	$12,099,000	$12,099,000
Usage Charge Rev.[b]	$36,480,000	$32,832,000	$31,008,000	$29,184,000	$27,360,000	$25,536,000	$21,888,000	$18,240,000	$14,592,000
Water Shortage Charge Rev.[c]			$1,550,000	$2,189,000	$2,736,000	$3,830,000	$5,472,000	$6,384,000	$6,566,000
Other Operating Rev.	$5,902,000	$5,902,000	$5,902,000	$5,902,000	$5,902,000	$5,902,000	$5,902,000	$5,902,000	$5,902,000
Total Sources of Funds	$54,481,000	$50,833,000	$50,559,000	$49,374,000	$48,097,000	$47,367,000	$45,361,000	$42,625,000	$39,159,000
(% of normal)	-	93%	93%	91%	88%	87%	83%	78%	72%
Uses of Funds									
Salaries & Benefits	$5,993,000	$5,993,000	$5,993,000	$5,993,000	$5,993,000	$5,993,000	$5,993,000	$5,993,000	$5,993,000
Maintenance and Services	$4,096,000	$4,096,000	$4,096,000	$4,096,000	$4,096,000	$4,096,000	$4,096,000	$4,096,000	$4,096,000
Minor Capital	$45,000	$45,000	$45,000	$45,000	$45,000	$45,000	$45,000	$45,000	$45,000
Water Purchases[d]	$18,187,000	$16,254,000	$15,459,000	$14,550,000	$13,640,000	$12,731,000	$10,912,000	$9,094,000	$7,275,000
Utilities, Chemicals[d]	$1,163,000	$1,047,000	$989,000	$930,000	$872,000	$814,000	$698,000	$582,000	$465,000
Administrative Allocation	$2,664,000	$2,664,000	$2,664,000	$2,664,000	$2,664,000	$2,664,000	$2,664,000	$2,664,000	$2,664,000
Utility Billing Services	$2,572,000	$2,572,000	$2,572,000	$2,572,000	$2,572,000	$2,572,000	$2,572,000	$2,572,000	$2,572,000
Water Conservation[e]	$1,184,000	$1,316,000	$1,393,000	$1,480,000	$1,579,000	$1,691,000	$1,973,000	$2,368,000	$2,960,000
O&M Projects	$260,000	$260,000	$260,000	$260,000	$260,000	$260,000	$260,000	$260,000	$260,000
Recycled Water Purchases	$18,000	$18,000	$18,000	$18,000	$18,000	$18,000	$18,000	$18,000	$18,000
Turnback @ 5%	$(900,000)	$(900,000)	$(900,000)	$(900,000)	$(900,000)	$(900,000)	$(900,000)	$(900,000)	$(900,000)
Transfers To									
Utility Undrgrnd. Impact Fund	$2,191,000	$2,191,000	$2,191,000	$2,191,000	$2,191,000	$2,191,000	$2,191,000	$2,191,000	$2,191,000
Debt Service Funds	$824,000	$824,000	$824,000	$824,000	$824,000	$824,000	$824,000	$824,000	$824,000
Capital Projects (Approp.)[f]	$13,790,000	$13,790,000	$13,790,000	$14,000,000	$13,500,000	$13,500,000	$13,000,000	$12,000,000	$11,000,000
Other Funds/Reserves	$2,394,000	$2,394,000	$2,394,000	$2,394,000	$2,394,000	$2,394,000	$2,394,000	$2,394,000	$2,394,000
Total Uses of Funds	$54,481,000	$52,564,000	$51,788,000	$51,117,000	$49,748,000	$48,893,000	$46,740,000	$44,201,000	$41,857,000
(% of normal)		96%	95%	94%	91%	90%	86%	81%	77%
Surplus/(Deficit) in Operations	$-	$(1,731,000)	$(1,229,000)	$(1,743,000)	$(1,651,000)	$(1,526,000)	$(1,379,000)	$(1,576,000)	$(2,698,000)
Catastrophic Reserve									
Available Balance[g]	$17,500,000	$17,500,000	$17,500,000	$17,500,000	$17,500,000	$17,500,000	$17,500,000	$17,500,000	$17,500,000
Excess Use Penalty Revenue[h]						$-	$-	$-	$-
Used to Cover Oper. Deficit[i]	$-	$(1,731,000)	$(1,229,000)	$(1,743,000)	$(1,651,000)	$(1,526,000)	$(1,379,000)	$(1,576,000)	$(2,698,000)
Ending Balance (after 1 year)	$17,500,000	$15,769,000	$16,271,000	$15,757,000	$15,849,000	$15,974,000	$16,121,000	$15,924,000	$14,802,000
Water Shortage Charge	-	-	5%	7.5%	10%	15%	25%	35%	45%

(a) Reflects estimated FY 21-22 revenues and expenses under "normal" budgetary, water supply, water demand, and economic conditions, as a basis for financial analysis. Normal water demand, revenues, and expenses were derived from the 2021 water rate study recently completed by the City.

(b) Water usage charge revenue is estimated to decline in proportion with reduced water sales.

(c) Shortage charges are imposed in conjunction with mandatory measures when the use reduction goal exceeds 10 percent and escalate through higher stages to limit the operating deficit.

(d) Water purchases, energy, and chemical costs would all decline in proportion to reduced water usage.

(e) Water conservation and demand management costs would increase in inverse proportion to reduced water sales.

(f) Funding of the capital program could be restricted when the use reduction goal exceeds 10 percent to help bridge the financial deficit and lessen the impact on reserves.

(g) Assumes Catastrophic Reserve is fully funded and available at the outset of a water shortage. Undesignated reserves may also be available at the outset of a water shortage and would be used prior to drawing from the Catastrophic Reserve.

(h) Excess use penalties would be imposed in Stages 5, 6, 7, and 8, but are not expected to generate any revenue, as the penalties can be avoided. Any penalty revenue received would be used to replenish the Catastrophic Reserve and/or fund conservation activities.

(i) Undesignated Reserves and/or the Catastrophic Reserve would be used to offset any operational deficit.

Table 9-7 summarizes a sample water bill (not including wastewater fees) for an average Single Family Residential service that uses water consistent with the use reduction goals compared to a sample bill for an average Single Family Residential service that does not reduce water use during declared shortages.

Table 9-7. Sample Single Family Residential Charges

Shortage Stage	Single Family Use Reduction Goal[a]	Monthly Water Use, Gallons	Monthly Service Charge	Water Usage Charge	Water Shortage Charge	Excess Use Penalty	Total Monthly Water Bill	Change from Normal Bill [d]
Average Single Family Customer Meeting Reduction Goals[b]								
Normal Conditions	0%	10,000	$14.09	$65.10	n/a	n/a	$79.19	
Stage 1	10%	9,000	$14.09	$58.31	n/a	n/a	$72.40	($6.79)
Stage 2	15%	8,500	$14.09	$54.92	$2.75	n/a	$71.75	($7.44)
Stage 3	20%	8,000	$14.09	$51.52	$3.86	n/a	$69.47	($9.72)
Stage 4	25%	7,500	$14.09	$48.13	$4.81	n/a	$67.03	($12.16)
Stage 5	(c)	6,500	$14.09	$35.22	$5.28	$-	$54.60	($24.59)
Stage 6	(c)	4,900	$14.09	$25.72	$6.43	$-	$46.24	($32.95)
Stage 7	(c)	3,200	$14.09	$17.37	$6.08	$-	$37.54	($41.65)
Stage 8	(c)	2,700	$14.09	$14.98	$6.74	$-	$35.80	($43.39)
Average Single Family Customer With No Water Use Reduction [b]								
Normal Conditions	0%	10,000	$14.09	$65.10	n/a	n/a	$79.19	
Stage 1	10%	10,000	$14.09	$65.10	n/a	n/a	$79.19	$0.00
Stage 2	15%	10,000	$14.09	$65.10	$3.26	n/a	$82.45	$3.26
Stage 3	20%	10,000	$14.09	$65.10	$4.88	n/a	$84.07	$4.88
Stage 4	25%	10,000	$14.09	$65.10	$6.51	n/a	$85.70	$6.51
Stage 5	(c)	10,000	$14.09	$63.30	$9.50	$15.00	$101.89	$22.70
Stage 6	(c)	10,000	$14.09	$63.30	$15.83	$40.00	$133.22	$54.03
Stage 7	(c)	10,000	$14.09	$63.30	$22.16	$100.00	$199.55	$120.36
Stage 8	(c)	10,000	$14.09	$63.30	$28.49	$240.00	$345.88	$266.69

(a) Stage 1 water reduction goal is voluntary. Stages 2-5 water reduction goals are mandatory.

(b) Assumes Single Family customer with 5/8" meter, a 3-person household, summertime irrigation, and a sewer cap of 3,500 gallons.

(c) During Stages 5, 6, 7, and 8 customers would be subject to specific water allocations in order to meet required use reduction targets.

(d) Comparison is with water bill based on normal water usage and standard water rates.

~~Table 9-7. Sample Single Family Residential Charges~~

~~Shortage Stage~~	~~Single Family Use Reduction Goal[a]~~	~~Monthly Water Use, Gallons~~	~~Monthly Service Charge~~	~~Water Usage Charge~~	~~Water Shortage Charge~~	~~Excess Use Penalty~~	~~Total Monthly Water Bill~~	~~Change from Normal Bill [d]~~
~~Average Single Family Customer Meeting Reduction Goals[b]~~								
~~Normal Conditions~~	~~0%~~	~~10,000~~	~~$14.09~~	~~$65.10~~	~~n/a~~	~~n/a~~	~~$79.19~~	

Table 9-7. Sample Single Family Residential Charges

Shortage Stage	Single Family Use Reduction Goal[a]	Monthly Water Use, Gallons	Monthly Service Charge	Water Usage Charge	Water Shortage Charge	Excess Use Penalty	Total Monthly Water Bill	Change from Normal Bill[d]
Stage 1	10%	9,000	$14.09	$58.31	n/a	n/a	$72.40	$(6.79)
Stage 2	15%	8,500	$14.09	$54.92	$2.75	n/a	$71.75	$(7.44)
Stage 3	20%	8,000	$14.09	$51.52	$3.86	n/a	$69.47	$(9.72)
Stage 4	25%	7,500	$14.09	$48.13	$4.81	n/a	$67.03	$(12.16)
Stage 5	(c)	6,500	$14.09	$35.22	$5.28	$-	$54.60	$(24.59)
Stage 6	(c)	4,900	$14.09	$25.72	$6.43	$-	$46.24	$(32.95)
Stage 7	(c)	3,200	$14.09	$17.37	$6.08	$-	$37.54	$(41.65)
Stage 8	(c)	2,700	$14.09	$14.98	$6.74	$-	$35.80	$(43.39)
Average Single Family Customer With No Water Use Reduction [b]								
Normal Conditions	0%	10,000	$14.09	$65.10	n/a	n/a	$79.19	
Stage 1	10%	10,000	$14.09	$65.10	n/a	n/a	$79.19	$-
Stage 2	15%	10,000	$14.09	$65.10	$3.26	n/a	$82.45	$3.26
Stage 3	20%	10,000	$14.09	$65.10	$4.88	n/a	$84.07	$4.88
Stage 4	25%	10,000	$14.09	$65.10	$6.51	n/a	$85.70	$6.51
Stage 5	(c)	10,000	$14.09	$65.10	$9.77	$8.02	$96.98	$17.79
Stage 6	(c)	10,000	$14.09	$65.10	$16.28	$46.02	$141.48	$62.29
Stage 7	(c)	10,000	$14.09	$65.10	$22.79	$154.56	$256.53	$177.34
Stage 8	(c)	10,000	$14.09	$65.10	$29.30	$259.59	$368.07	$288.88

(a) Stage 1 water reduction goal is voluntary. Stages 2-5 water reduction goals are mandatory.
(b) Assumes Single Family customer with 5/8" meter, a 3 person household, summertime irrigation, and a sewer cap of 3,500 gallons.
(c) During Stages 5, 6, 7, and 8 customers would be subject to specific water allocations in order to meet required use reduction targets.
(d) Comparison is with water bill based on normal water usage and standard water rates.

9.2 Use of Reserves

To compensate for loss of revenue from reduced water sales and for increased costs for implementing water shortage responses and compliance and enforcement efforts, the Undesignated Reserve and/or Catastrophic Reserve may be employed in Stages 1 through 8. In the event of a water shortage, adoption of a Water Shortage Resolution by the Santa Rosa City Council will allow the appropriation of funds from these reserves, which may be drawn down to absorb part of the financial deficit caused by a reduction in water rate revenues (due to lower water sales) and increase in costs (due to implementation of triggered water shortage actions and procedures for compliance and enforcement) that exceeds the reduction in operating costs during a water shortage emergency. This discretionary decision to draw down reserves would be made at the time of a water shortage and would depend on conditions that may exist at that time.

9.3 Capital Improvement Program Reductions

As progressive stages of the Shortage Plan are enacted, an additional measure may be taken to stabilize the financial outlook for the utility. Reductions in Capital Improvement Program expenditures could be implemented in Stage 2 through Stage 8. A decrease in capital spending would help to reduce the depletion of available reserves, as well as offset revenue losses resulting from decreased water sales and increased costs resulting from implementation of triggered water shortage actions and procedures for compliance and enforcement. This discretionary decision to reduce capital spending would be made at the time of a water shortage and would depend on conditions that may exist at that time.

10.0 MONITORING AND REPORTING

Monitoring and reporting are essential for evaluating whether response actions are achieving their intended water use reduction purposes or if improvements or new actions need to be considered.

During all water supply conditions, the City collects, tracks, and analyzes water use data and submits reports monthly to the State on urban water use. The State has been developing protocols for monthly urban water use reporting during water shortage conditions, and City staff has been participating in a stakeholder work group sponsored by the State to provide water supplier input and help refine reporting protocols. Although this process is still under development, the City anticipates being able to comply with all State requirements for monthly water shortage monitoring and reporting.

In Stages 1 through 4, the water reduction target ranges from 10 percent (Stage 1) to 25 percent (Stage 4). The water use reduction targets associated with each stage apply to all customers and are not allocation based. As such, the water targets for Stages 1 through 4 will be implemented as community-wide targets, and compliance will be tracked based on community-wide water use. During all water supply conditions (including normal and shortage conditions), the City monitors water use and water supply volumes on a monthly basis. All City services are metered, and delivery volumes are recorded monthly. In addition, water purchased from Sonoma Water and water produced by the City's wells are separately metered and recorded monthly. During shortage conditions, the City also tracks which shortage response actions are being implemented. During water shortage Stages 1 through 4, the City will monitor overall water use each month compared to planned use under normal water conditions, using existing tracking systems to assess progress toward achieving the reduction target.

In Stages 5 through 8, the water reduction target ranges from 30 percent (Stage 5) to over 50 percent (Stage 8). During these stages, each water service will be assigned its own water allocation, and the water use reduction targets for Stages 5 through 8 will be achieved based on customer adherence to these allocations. Progress on achieving the water reduction target will be tracked both on a community-wide basis and on a service-by-service basis to identify whether customers are adhering to their allocations. The City tracks deliveries to each service monthly and tracks water supply volume by source each month. In addition, the City assigns each water service to a customer sector (e.g., Single Family Residential) and regularly collects pertinent information necessary for calculating allocations each month (e.g., number of residents per dwelling unit). Furthermore, the City has upgraded its metering system to AMI technology, which can allow for monitoring customer water usage as frequently as deemed necessary for assessing compliance with allocations and helping customers achieve the reduction goal. During shortages in Stages 5 through 8, water supply data (Sonoma Water and City wells) will be tracked weekly if needed. The City will monitor overall water use each month compared to anticipated use under normal water conditions and will monitor use compared to customer allocations.

If reduction goals are not met through implementation of the Shortage Plan (during any water shortage Stage), the Director will notify the Board of Public Utilities and City Council and more aggressive action will be taken. Additionally, if it is determined that this Shortage Plan requires refinements in order to achieve reduction targets, the City will revise the Shortage Plan according to the procedures discussed in Section 10 and then adopt it and make it available as discussed in Section 11.

11.0 SHORTAGE PLAN REFINEMENT PROCEDURES

The Shortage Plan is best prepared and implemented as an adaptive management plan. Therefore, the City will use the results of its monitoring and reporting program described in Section 9 to evaluate whether this Shortage Plan requires refinements to ensure that its shortage response actions are effective and produce the desired results.

If it is determined that revised procedures and/or new or expanded actions would improve the Shortage Plan, the City will revise the Shortage Plan accordingly and then follow the procedures discussed in Section 12 to adopt the revised plan, submit it to DWR, and make it available to the public.

12.0 PLAN ADOPTION, SUBMITTAL, AND AVAILABILITY

This section provides information regarding the notification, public hearing, adoption, and submittal of the City's original and amended 2020 Water Shortage Contingency Plans. These processes were completed in parallel with those of the City's 2020 UWMP. This section also includes discussion on implementation of the Shortage Plan.

12.1 Notice of Public Hearing

In accordance with Water Code section 10642, the City must provide an opportunity for the public to provide input on ~~this~~ the Shortage Plan and any amendments which may occur. The City must consider all public input prior to its adoption. There are two audiences to be notified for the public hearing: cities and counties, and the public.

12.1.1 Notice to Cities and Counties Regarding Preparation of the Original 2020 Shortage Plan

Per California Water Code Section 10621, notice regarding preparation of the Shortage Plan was sent to Sonoma County more than 60 days prior to the public hearing date as noted in Table 12-1. The notice was also sent to neighboring cities and the Santa Rosa Regional Water Reuse System. The notice of preparation sent to the County and local cities is included in Appendix F.

The City coordinated the preparation of its Shortage Plan internally and coordinated the preparation of its water resiliency analysis (for the UWMP) both internally and with Sonoma Water and the agencies participating in the Regional Alliance for SB X7-7 compliance.

Upon substantial completion of the 2020 UWMP and Shortage Plan, the City provided the same agencies, including internally within the City and Sonoma County, notice of public hearing (included in Appendix F).

Notifications to cities and counties in accordance with the UWMP Act, is summarized in Table 12-1. Notification to Cities and Counties (DWR Table 10-1 Retail). In addition, the City notified Marin Municipal Water District, North Marin Water District, and Valley of the Moon Water District.

Table 12-1. Notification to Cities and Counties (DWR Table 10-1 Retail)

City Name	60 Day Notice	Notice of Public Hearing
Add additional rows as needed		
City of Cotati	Yes	Yes
City of Petaluma	Yes	Yes
City of Rohnert Park	Yes	Yes
City of Sebastopol	Yes	Yes
City of Sonoma	Yes	Yes
Town of Windsor	Yes	Yes
County Name *Drop Down List*	60 Day Notice	Notice of Public Hearing
Add additional rows as needed		
Sonoma County	Yes	Yes
NOTES:		

12.1.2 Notice to the Public for the Original 2020 Shortage Plan

To encourage community and public input on the development of the Shortage Plan, the City included information about its preparation and how to participate through an insert in the Utility bill and social media posts. The City also held three publicly noticed meetings of the City's Water Conservation Subcommittee of the Board of Public Utilities and held publicly noticed study sessions at meetings of the Board of Public Utilities and Santa Rosa City Council. The City also developed a dedicated webpage (srcity.org/UWMP) to provide information to the public related to development of the Shortage Plan and to provide access to the document for public review and comment.

Following completion of the Draft Shortage Plan, a notification of public hearing was placed in the local newspaper (Santa Rosa Press Democrat) about the 2020 Shortage update process, and copies of the Draft Shortage Plan were made available online on the City's website. Due to COVID 19 restrictions, City facilities were closed to public access and hard copies could not be provided for review at City facilities. During the public review period, local cities, and Sonoma County, as well as the general public, were encouraged to comment on the draft document which was available online at srcity.org/UWMP. Noticing for the public hearing was conducted pursuant to Section 6066 of the Government Code. Public hearing notifications were published in The Press Democrat. Copies of the published Notice of Public Hearing are included in Appendix F. In addition, the City notified Marin Municipal Water District, North Marin Water District, and Valley of the Moon Water District.

12.1.3 Notice to the Public for the Amended 2020 Shortage Plan

Notification of public hearing was placed in the local newspaper (Santa Rosa Press Democrat) about the Amended 2020 Shortage update process, and copies of this Shortage Plan were made available online on the City's website at srcity.org/UWMP. Noticing for the public hearing was conducted pursuant to Section 6066 of the Government Code. Public hearing notifications were published in The Press Democrat.

Copies of the published Notice of Public Hearing are included in Appendix F. In addition, the City notified Marin Municipal Water District, North Marin Water District, and Valley of the Moon Water District.

12.2 Public Hearing and Adoption

City Council held aA public hearing to discuss the Draft original 2020 Shortage Plan was held on June 8, 2021, in conjunction with the City Council meeting.

The public hearing provided an opportunity for all City water users and the public to become familiar with the Shortage Plan and ask questions about the City's planned responses for managing water demands and supply during water shortages. The draft original 2020 Shortage Plan was also made available online on the City's webpage (srcity.org/UWMP) for public inspection for 30 days prior to the public hearing. Due to COVID-19 restrictions, City facilities were closed to public access and hard copies could not be provided for review at City facilities. The original

This2020 Shortage Plan was adopted by the City Council on June 8, 2021. A copy of the adopted resolution is provided in Appendix G.

City Council held a public hearing to discuss this Amended 2020 Shortage Plan on November 30, 2021, in conjunction with the City Council meeting. This Amended 2020 Shortage Plan was also made available online on the City's webpage (srcity.org/UWMP) for public inspection for 30 days prior to the public hearing. The Amended 2020 Shortage Plan was adopted by the City Council on November 30, 2021. The adoption resolution is provided in Appendix G.

12.3 Plan Submittal

A hard copy of this the original 2020 Shortage Plan will bewas submitted to DWR within 30 days of adoption and an electronic copy will bewas submitted to DWR using the Water Use Efficiency (WUE) data submittal tool. A copy of the adopted original 2020 Shortage Plan will was also be submitted to the California State Library, and an electronic copy was made available to the cities and counties wo which the City provides water.

A hard copy of this amended 2020 Shortage Plan will be submitted to DWR within 30 days of adoption and an electronic copy will be submitted to DWR using the Water Use Efficiency (WUE) data submittal tool. A copy of the adopted Amended 2020 Shortage Plan will also be submitted to the California State Library.

No later than 30 days after adoption, an electronic copy of the Amended 2020 Shortage Plan will be made available to the cities and counties to which the City provides water.

~~No later than 30 days after adoption, an electronic copy of the adopted Shortage Plan will be made available (along with the 2020 UWMP) to the cities and counties to which the City provides water.~~

12.4 Public Availability

No later than 30 days after submittal to DWR, copies of this the original Shortage Plan will werebe available online on the City's website at srcity.org/UWMP.

No later than 30 days after submittal to DWR, copies of this Amended 2020 Shortage Plan will be available online on the City's website at srcity.org/UWMP.

Once the COVID-19 health restrictions have been lifted and City facilities open again to regular public access, hard copies will also be made available at the City's offices for public review during normal business hours. The Amended 2020 Shortage Plan will also be deposited for public access through the California State library.

12.5 Amending an Adopted Water Shortage Contingency Plan

The City may amend ~~this~~ its Shortage Plan and its ~~2020~~ UWMP jointly or separately. If the City amends the Shortage Plan in the future, the City will follow the notification, public hearing, adoption, and submittal process described above. In addition to submitting amendments to DWR through the WUE data Portal, copies of amendments or changes to the plan will be submitted to the California State Library and any city or county within which the City provides water supplies within 30 days after adoption. In addition, any amendments will be available online on the City's website.

Appendix A

California Water Code

California Water Code

This material is for informational purposes only and not to be used in place of official California Water Code (Water Code).

Water Code will be included in final version

Appendix B

2020 Water Shortage Contingency Plan Response Actions

2020 Water Shortage Contingency Plan Response Actions								
Shortage Level Response Actions	Stage 1 up to 10% Voluntary	Stage 2 up to 15% Mandatory	Stage 3 up to 20% Mandatory	Stage 4 up to 25% Mandatory	Stage 5 up to 30% Mandatory	Stage 6 up to 40% Mandatory	Stage 7 up to 50% Mandatory	Stage 8 Over 50% Mandatory
Adopt Resolution declaring water shortage emergency and shortage stage and establishing water use prohibitions	Council Action	Council Action	Council Action	Council Action	Council Action	Council Action	Council Action	Council Action
Implement Communication Protocols	✓	✓	✓	✓	✓	✓	✓	✓
Conduct compliance and enforcement as needed	✓	✓	✓	✓	✓	✓	✓	✓
Implement customer service and assistance with Water Use Efficiency programs	✓	✓	✓	✓	✓	✓	✓	✓
Enforce Water Waste Ordinance	✓	✓	✓	✓	✓	✓	✓	✓
Implement Water Waste Patrols	✓	✓	✓	✓	✓	✓	✓	✓
Increase staffing resources (temporary, reassignments, and/or overtime)	✓	✓	✓	✓	✓	✓	✓	✓
Require shut-off nozzles for garden and utility hoses	✓	✓	✓	✓	✓	✓	✓	✓
Prohibit washing hard surfaces with hose	✓	✓	✓	✓	✓	✓	✓	✓
Limit flushing of mains and hydrants	✓	✓	✓	✓	✓	✓	✓	✓
Enforce Statewide mandatory prohibitions as needed	✓	✓	✓	✓	✓	✓	✓	✓

2020 Water Shortage Contingency Plan Response Actions								
Shortage Level Response Actions	Stage 1 up to 10% Voluntary	Stage 2 up to 15% Mandatory	Stage 3 up to 20% Mandatory	Stage 4 up to 25% Mandatory	Stage 5 up to 30% Mandatory	Stage 6 up to 40% Mandatory	Stage 7 up to 50% Mandatory	Stage 8 Over 50% Mandatory
Adopt Ordinance to authorize Water Shortage Charge		Council Action	Council Action	Council Action	Council Action	Council Action	Council Action	Council Action
Implement Water Shortage Charge		5%	7.5%	10%	15%	25%	35%	45%
Require "Water on Request" program for restaurants		✓	✓	✓	✓	✓	✓	✓
Require hotel and lodging industry to incorporate signage and/or messaging regarding washing of linens only upon request		✓	✓	✓	✓	✓	✓	✓
Prohibit power washing (unless variance obtained)			✓	✓	✓	✓	✓	✓
Limit hours of irrigation to 8pm-6am			✓	✓	✓	✓	✓	✓
Prohibit operation of ornamental fountains and water features				✓	✓	✓	✓	✓
Adopt Ordinance to authorize Water Allotments and Excess Use Penalty					Council Action	Council Action	Council Action	Council Action
Assign ~~allotment~~ allocation to each SFR service					40 GPCD; landscape 2,000 gals/mo (May-Oct)	36 GPCD; landscape 1,000 gals/mo (May-Oct)	32 GPCD	28 GPCD
Assign ~~allotment~~ allocation to each MFR service					40 GPCD; mod. landscape budget (May-Oct)	36 GPCD; mod. landscape budget (May-Oct)	32 GPCD	28 GPCD

2020 Water Shortage Contingency Plan Response Actions								
Shortage Level Response Actions	Stage 1 up to 10% Voluntary	Stage 2 up to 15% Mandatory	Stage 3 up to 20% Mandatory	Stage 4 up to 25% Mandatory	Stage 5 up to 30% Mandatory	Stage 6 up to 40% Mandatory	Stage 7 up to 50% Mandatory	Stage 8 Over 50% Mandatory
Assign ~~allotment~~ allocation to each CII service					85% of previous 12 months usage	80% of previous 12 months usage	75% of previous 12 months usage	70% of previous 12 months usage
Assign ~~allotment~~ allocation to each Irrigation service					40% of ET based water budget	20% of ET based water budget	10% of ET based water budget	No allocation
Assign ~~allotment~~ allocation to each Health and Safety service					95% of previous 12 months	90% of previous 12 months	85% of previous 12 months	80% of previous 12 months
Implement Excess Use Penalty to enforce Water Allocations					~~10% for 101-150% of allocation 20% for > 150%~~ See Table 5-2 in Shortage Plan	~~25% for 101-150% of allocation 50% for > 150%~~ See Table 5-2 in Shortage Plan	~~40% for 101-150% of allocation 80% for > 150%~~ See Table 5-2 in Shortage Plan	~~50% for 101-150% of allocation 100% for > 150%~~ See Table 5-2 in Shortage Plan
Require new construction offset demand new demand (1:1 ratio)					~~✓1:1 ratio~~	~~✓2:1 ratio~~	~~✓3:1 ratio~~	~~✓4:1 ratio~~
Prohibit filling new swimming pools and spas					✓	✓	✓	✓
Require use of recycled water for construction dust control if available and filling station is within one mile					✓	✓	✓	✓
Prohibit filling or topping off of existing swimming pools						✓	✓	✓
Prohibit installation of water-using landscaping at new construction						✓	✓	✓
Prohibit installation or replanting of water-using landscaping at all sites							✓	✓

2020 Water Shortage Contingency Plan Response Actions								
Shortage Level Response Actions	Stage 1 up to 10% Voluntary	Stage 2 up to 15% Mandatory	Stage 3 up to 20% Mandatory	Stage 4 up to 25% Mandatory	Stage 5 up to 30% Mandatory	Stage 6 up to 40% Mandatory	Stage 7 up to 50% Mandatory	Stage 8 Over 50% Mandatory
Prohibit landscape irrigation (reuse of rainwater and greywater allowed)								✓

Appendix C

Communication Protocols

Communication Protocols for Water Shortages	
Stage 1 Response Actions	Stage 1 Communication Actions
• City Council adopts resolution declaring Stage 1 water shortage emergency, requesting 10 percent voluntary conservation, prohibiting water waste, reducing non-essential uses, and authorizing implementation of Shortage Plan, and triggering Stage 1 prohibitions and restrictions and State mandated prohibitions if any • Launch/sustain public information campaign • Implement Water Waste Patrols • Prohibitions/Restrictions: — Continue enforcing Water Waste Ordinance (always in effect, all water supply conditions) — Require hose-end shut-off nozzles for all garden and utility hoses — Prohibit use of potable water for washing hard surfaces, unless required for public health and safety — State prohibitions (if any) • Implement compliance and enforcement procedures • Operations staff to post explanatory signs when flushing mains or hydrants and minimize volume used, and to minimize volume of water used whenever feasible • Increase City support: Consider hiring temporary staff and increasing overtime budget for regular staff to help implement the Shortage Plan	Implement communication plan to keep stakeholders informed: • State regulators and local officials • Sonoma Water and local water providers • Customers, general public, and interested parties Messages (in English and Spanish): • Stage 1 water shortage level in effect • Reduction target is 10 percent voluntary, non-allocation-based, community-wide effort • Minimize non-essential uses • New prohibitions and restrictions on end uses are in effect (describe all) • Eliminate water waste (requirements of ordinance and how to report water waste) • Highlight Water Use Efficiency programs (include contacts: phone number, email, website URL) Inform State regulators, local officials, Sonoma Water, and local water providers via • Meetings, email, phone, US postal service, online portals Inform customers, general public, and interested parties via • Bill inserts and envelope messages (customers) • Letters and other direct mail marketing (such as postcards) to customer sectors and stakeholders (e.g., property managers and landscape professionals) • Media releases • Social media posts • Updated website content • Santa Rosa's City Connections newsletter and e-gov delivery news alerts • Presentations at Board of Public Utilities (BPU) and City Council meetings • Presentations at meetings of regional policy makers and governing bodies • Presentations to civic groups, nonprofits, businesses, large employers, schools • Signs applied to City vehicles and/or banners posted in downtown core • Public information booths at local fairs, festivals, events • Sonoma Marin Saving Water Partnership public information campaign • Ad buys: Radio, print, digital, and social media

Communication Protocols for Water Shortages	
Stage 2 Response Actions	Stage 2 Communication Actions
• Actions from previous stage in effect • City Council adopts resolution/ordinance declaring Stage 2 water shortage emergency, mandating 15 percent non-allocation-based water reduction communitywide for all user classes, and authorizing implementation of Shortage Plan and Water Shortage Charge (5 percent), and triggering restrictions and prohibitions for Stages 1-2 and State mandated prohibitions if any • Launch/expand public information campaign • Implement Water Shortage Charge (5 percent) • Additional Prohibitions/Restrictions: — Restaurants may only serve water upon request — Hotel and lodging industry must incorporate signage and/or messaging regarding washing of linens only upon request — State prohibitions (if any)	Implement/expand communication plan to inform/update: • State regulators and local officials • Sonoma Water and local water providers • Customers, general public, and interested parties Messages (in English and Spanish): • Same as previous stage with these modifications and/or additions — Stage 2 water shortage level — Reduction target is 15 percent mandatory, non-allocation-based, communitywide — Additional prohibitions and restrictions on end uses are in effect (describe all) — Water Shortage Charge is in effect (5 percent of customer usage rate) Inform State Regulators, local officials, Sonoma Water, and local water providers via • Same as previous stage Inform customers, general public, and interested parties via • Same as previous stage plus — Increase ad buys: Radio, print, digital, and social media — Send letter to customers to inform them about Stage 2 Water Shortage Charge and Stage 1-2 prohibitions and restrictions. Provide information about Water Use Efficiency programs and technical assistance Request updated information in preparation for water allocations (Stage 5 or higher) — If Stage 3 or higher is anticipated, reach out to landscape and irrigation industry to inform them of potential need to limit irrigation hours (Stage 3-8, 8pm-6am)

Communication Protocols for Water Shortages	
Stage 3 Response Actions	Stage 3 Communication Actions
• Actions from previous stage in effect • City Council adopts resolution/ordinance declaring Stage 3 water shortage emergency, mandating 20 percent non-allocation-based water reduction communitywide for all user classes, and authorizing implementation of Shortage Plan and Water Shortage Charge (75 percent), and triggering restrictions and prohibitions for Stages 1-3 and State mandated prohibitions if any • Launch/expand public information campaign • Implement Water Shortage Charge (7.5 percent) • Additional Prohibitions/Restrictions: — Prohibit pressure washing with potable water (except for public for health and safety) unless a variance is obtained from Water Department — Limit landscape irrigation to the hours of 8PM to 6AM — State prohibitions (if any)	Implement/expand communication plan to inform/update • State regulators and local officials • Sonoma Water and local water providers • Customers, general public, and interested parties Messages (in English and Spanish): • Same as previous stages with these modifications and/or additions — Stage 3 water shortage level — Reduction target is 20 percent mandatory, non-allocation-based, communitywide — Additional prohibitions and restrictions on end uses are in effect (describe all) — Water Shortage Charge is in effect (7.5 percent of customer usage rate) Inform State Regulators, local officials, Sonoma Water, and local water providers via • Same as previous stages Inform customers, general public, and interested parties via • Same as previous stages plus — Increase frequency and scope of ad buys — Send letter to customers to inform them about Stage 3 Water Shortage Charge and Stage 1-3 prohibitions and restrictions. Provide information about Water Use Efficiency programs and technical assistance Request updated information in preparation for water allocations (Stage 5 or higher) — Reach out to landscape and irrigation industry to inform them of irrigation hours. If Stage 4 or higher is anticipated, inform them about limits on irrigation and landscape installation that would be triggered — Deliver more frequent presentations at BPU meetings and City Council meetings

Communication Protocols for Water Shortages	
Stage 4 Response Actions	Stage 4 Communication Actions
• Actions from previous stage in effect • City Council adopts resolution/ordinance declaring Stage 4 water shortage emergency, mandating 25 percent non-allocation-based water reduction communitywide for all user classes, and authorizing implementation of Shortage Plan and Water Shortage Charge (10 percent), and triggering restrictions and prohibitions for Stages 1-4 and State mandated prohibitions if any • Launch/expand public information campaign • Implement Water Shortage Charge (10 percent) • Additional Prohibitions/Restrictions: — Prohibit filling and operation of decorative water features and ornamental fountains — State prohibitions (if any)	Implement/expand communication plan to inform/update: • State regulators and local officials • Sonoma Water and local water providers • Customers, general public, and interested parties Messages (in English and Spanish): • Same as previous stages with these modifications and/or additions • Stage 4 water shortage level • Reduction target is 25 percent mandatory, non-allocation-based, communitywide • Additional prohibitions and restrictions on end uses are in effect (describe all) • Water Shortage Charge is in effect (10 percent of customer usage rate) Inform State Regulators, local officials, Sonoma Water, and local water providers via • Same as previous stages Inform customers, general public, and interested parties via • Same as previous stages plus — Increase frequency and scope of ad buys — Send letter to customers to inform them about Stage 4 Water Shortage Charge and Stage 1-4 prohibitions and restrictions. Provide information about Water Use Efficiency programs and technical assistance Request updated information in preparation for water allocations (Stage 5 or higher) — Reach out to landscape and irrigation industry to inform them of current (Stage 4). If Stage 5 or higher is anticipated, inform them about limits on irrigation and landscape installation and about landscape related water allocations for all customer sectors in Stages 5-8 — Work with land use planners, developers, builders, general contractors, etc., to prepare for potential limits on new demand (offset program for Stages 5-8) Also inform them of other limits/restrictions related to landscape irrigation and installation (Stages 3-8) and operation and filling of pools/spas (Stages 4-8)

Communication Protocols for Water Shortages	
Stage 5 Response Actions	Stage 5 Communication Actions
• Actions from previous stage in effect • City Council adopts resolution/ordinance declaring Stage 5 water shortage emergency, mandating Stage 5 allocation-based water reductions for each service, and authorizing implementation of Shortage Plan, Water Shortage Charge (15 percent), and Stage 5 Excess Use Penalty structure, and triggering restrictions and prohibitions for Stages 1-5 and State mandated prohibitions if any • Launch/expand public information campaign • Implement Water Shortage Charge (15 percent) • Implement Stage 5 water allocations • Implement Stage 5 Excess Use Penalty ~~can be imposed~~ for water use over allocation ~~(10 percent for use over 100 percent and up to 150 percent of allocation and 20 percent for use over 150 percent)~~ • Additional Prohibitions/Restrictions: — Prohibit filling of new swimming pools and spas — Recycled water must be used for construction dust control if it is available and if filling station is within one mile of site — New construction must offset new demand by a ratio of 1 to 1 — State prohibitions (if any)	Implement/expand communication plan to inform/update: • State regulators and local officials • Sonoma Water and local water providers • Customers, general public, and interested parties Messages (in English and Spanish): • Same as previous stages with these modifications and/or additions — Stage 5 water shortage level — Reduction is mandatory and based on Stage 5 allocations assigned to each service — Stage 5 Excess U~~u~~se P~~p~~enalty structure for exceeding water allocation ~~can be imposed for use over allocation (10 percent for use over 100 percent and up to 150 percent of allocation and 20 percent for use over 150 percent)~~ — Water Shortage Charge is in effect (15 percent of customer usage rate) — Additional prohibitions and restrictions on end uses are in effect (describe all) — New construction must offset demand by ration of 1 to 1 Inform State Regulators, local officials, Sonoma Water, and local water providers via • Same as previous stages Inform customers, general public, and interested parties via • Same as previous stages plus — Increase frequency and scope of ad buys — Send letter to customers to inform them about Stage 5 Water Shortage Charge, Water Allocations, and Stage 1-5 prohibitions and restrictions. Provide information about Water Use Efficiency programs and technical assistance and include information about Excess Use Penalty and appeal/exemption processes — Reach out to landscape and irrigation industry to inform them of current (Stage 5). If Stage 6 or higher is anticipated, inform them about limits on irrigation and landscape installation about landscape related water allocations for all customer sectors in Stages 6-8 — Work with land use planners, developers, builders, general contractors, etc., to implement ~~1:1 offset program for new demand~~the water demand offset program

Communication Protocols for Water Shortages	
Stage 6 Response Actions	Stage 6 Communication Actions
• Actions from previous stages in effect • City Council adopts resolution/ordinance declaring Stage 6 water shortage emergency, mandating Stage 6 allocation-based water reductions for each service, authorizing implementation of Shortage Plan, Water Shortage Charge (25 percent), and Stage 6 Excess Use Penalty structure, and triggering restrictions and prohibitions for Stages 1-6 and State mandated prohibitions if any • Launch/sustain public information campaign • Implement Water Shortage Charge (25 percent) • Implement Stage 6 water allocations • Implement Stage 6 Excess Use Penalty structure ~~can be imposed~~ for water use over allocation ~~(25 percent for use over 100 percent and up to 150 percent of allocation and 50 percent for use over 150 percent)~~ • Additional Prohibitions/Restrictions: — Prohibit filling and topping of existing pools and spas — Prohibit installation of landscaping at new construction ~~— New construction must offset new demand by a ratio of 2 to 1~~ — State prohibitions (if any)	Implement/expand communication plan to inform/update • State regulators and local officials • Sonoma Water and local water providers • Customers, general public, and interested parties Messages (in English and Spanish): • Same as previous stages with these modifications and/or additions — Stage 6 water shortage level — Reduction is mandatory and based on Stage 6 allocations assigned to each service — Stage 6 Excess U~~u~~se P~~p~~enalty structure for exceeding water allocation ~~can be imposed for use over allocation (25 percent for use over 100 percent and up to 150 percent of allocation and 50 percent for use over 150 percent)~~ — Water Shortage Charge is in effect (25 percent of customer usage rate) — Additional prohibitions and restrictions on end uses are in effect (describe all) ~~— New construction must offset demand by ration of 2 to 1~~ Inform State Regulators, local officials, Sonoma Water, and local water providers via • Same as previous stages Inform customers, general public, and interested parties via • Same as previous stages plus — Increase frequency and scope of ad buys — Send letter to customers to inform them about Stage 6 Water Shortage Charge, Water Allocations, and Stage 1-6 prohibitions and restrictions. Provide information about Water Use Efficiency programs and technical assistance and include information about Excess Use Penalty and appeal/exemption processes — Reach out to landscape and irrigation industry to inform them of current (Stage 6). If Stage 7 or 8 is anticipated, inform them about limits on irrigation and landscape installation and water allocations for all customer sectors — Require completed self-audit checklist for dedicated landscape irrigation meters to verify water efficiency onsite ~~Work with land-use planners, developers, and builders to implement 2:1 offset program for new demand~~

Communication Protocols for Water Shortages	
Stage 7 Response Actions	Stage 7 Communication Actions
• Actions from previous stages in effect • City Council adopts resolution/ordinance declaring Stage 7 water shortage emergency, mandating Stage 7 allocation-based water reductions for each service, authorizing implementation of Shortage Plan, Water Shortage Charge (35 percent), and Stage 6 Excess Use Penalty structure, and triggering restrictions and prohibitions for Stages 1-7 and State mandated prohibitions if any • Launch/sustain public information campaign • Implement Water Shortage Charge (35 percent) • Implement Stage 7 water allocations • Implement Stage 7 Excess Use Penalty ~~can be imposed~~ for water use over allocation ~~(40 percent for use over 100 percent and up to 150 percent of allocation and 80 percent for use over 150 percent)~~ • Additional Prohibitions/Restrictions: — Prohibit all landscape installation and replanting — ~~Per allocations, no residential irrigation unless via Dedicated Irrigation meter~~ — ~~New construction must offset new demand by a ratio of 3 to 1~~ — State prohibitions (if any)	Implement/expand communication plan to inform/update • State regulators and local officials • Sonoma Water and local water providers • Customers, general public, and interested parties Messages (in English and Spanish): • Same as previous stages with these modifications and/or additions — Stage 7 water shortage level — Reduction is mandatory and based on Stage 7 allocations assigned to each service — Stage 7 Excess U~~u~~se P~~p~~enalty structure for exceeding water allocation ~~can be imposed for use over allocation (40 percent for use over 100 percent and up to 150 percent of allocation and 80 percent for use over 150 percent)~~ — Water Shortage Charge is in effect (35 percent of customer usage rate) — ~~New construction must offset demand by ration of 3 to 1~~ — Additional prohibitions and restrictions on end uses are in effect (describe all) Inform State Regulators, local officials, Sonoma Water, and local water providers via • Same as previous stages Inform customers, general public, and interested parties via • Same as previous stages plus — Increase frequency and scope of ad buys — Send letter to customers to inform them about Stage 7 Water Shortage Charge, Water Allocations, and Stage 1-7 prohibitions and restrictions. Provide information about Water Use Efficiency programs and technical assistance and include information about Excess Use Penalty and appeal/exemption processes — Reach out to landscape and irrigation industry to inform them of current (Stage 7). If Stage 8 anticipated, inform them about limits on irrigation and landscape installation and water allocations for all customer sectors in Stage 8 — ~~Work with land use planners, developers, and builders to implement offset 3:1 program for new demand~~

Communication Protocols for Water Shortages	
Stage 8 Response Actions	Stage 8 Communication Actions
• Actions from previous stages in effect • City Council adopts resolution/ordinance declaring Stage 8 water shortage emergency, mandating Stage 8 allocation-based water reductions for each service, authorizing implementation of Shortage Plan, Water Shortage Charge (45 percent), and Stage 7 Excess Use Penalty structure, and triggering restrictions and prohibitions for Stages 1-8 and State mandated prohibitions if any • Launch/sustain public information campaign • Implement Water Shortage Charge (45 percent) • Implement Stage 8 water allocations • Implement Stage 8 Excess Use Penalty ~~can be imposed~~ for water use over allocation ~~(50 percent for over 100 percent and up to 150 percent of allocation and 100 percent for use over 150 percent)~~ — Additional Prohibitions/Restrictions: — Prohibit all landscape irrigation — ~~New construction must offset new demand by a ratio of 4 to 1~~ — State prohibitions (if any)	Implement/expand communication plan to inform/update • State regulators and local officials • Sonoma Water and local water providers • Customers, general public, and interested parties Messages (in English and Spanish): • Same as previous stages with these modifications and/or additions — Stage 8 water shortage level — Reduction is mandatory and based on Stage 8 allocations assigned to each service — Stage 8 Excess U~~u~~se P~~p~~enalty ~~can be~~ structure for exceeding water allocation ~~imposed for use over allocation (50 percent for use over 100 percent and up to 150 percent of allocation, and 100 percent for use over 150 percent)~~ — Water Shortage Charge is in effect (45 percent of customer usage rate) — ~~New construction must offset demand by ration of 4 to 1~~ — Additional prohibitions and restrictions on end uses are in effect (describe all) Inform State Regulators, local officials, Sonoma Water, and local water providers via • Same as previous stages Inform customers, general public, and interested parties via • Same as previous stages plus — Increase frequency and scope of ad buys — Send letter to customers to inform them about Stage 8 Water Shortage Charge, Water Allocations, and Stage 1-8 prohibitions and restrictions. Provide information about Water Use Efficiency programs and technical assistance and include information about Excess Use Penalty and appeals/exemption processes — Reach out to landscape and irrigation industry to inform them of Stage 8 limits on irrigation and landscape installation — ~~Work with land use planners, developers, and builders to implement offset 4:1 program for new demand~~

Appendix D

Sample Resolution of the Council of the City of Santa Rosa Declaring a Water Shortage Emergency

RESOLUTION OF THE COUNCIL OF THE CITY OF SANTA ROSA DECLARING A WATER SHORTAGE EMERGENCY, IMPLEMENTING STAGE __ OF THE CITY'S WATER SHORTAGE CONTINGENCY, CALLING FOR A _____% REDUCTION IN COMMUNITYWIDE WATER USE, AND AUTHORIZING USE OF THE WATER DEPARTMENT'S UNDESIGNATED AND CATASTROPHIC RESERVES

WHEREAS, the City of Santa Rosa is a City empowered by the City Charter to provide water service within certain boundaries; and

WHEREAS the Sonoma County Water Agency (Sonoma Water) is the wholesaler of water to the City of Santa Rosa; and

WHEREAS, due to (current condition – drought, contamination, etc.), water supply conditions indicate that a ____% reduction in demand is required to ensure adequate supply in 20__; and

WHEREAS, the Sonoma Water has reduced delivery to the City and all prime contractors by ____%; and

WHEREAS, the City of Santa Rosa has the authority, by City Charter, Sections 3 and 25(b) and City Code, Section 14-04.020 Administration and regulations authority, and the responsibility to adopt water demand reduction measures within its area of service; and

WHEREAS, the City of Santa Rosa has the authority through the activation of its Water Shortage Contingency Plan to employ the Undesignated Reserve and the Catastrophic Reserve during a Water Shortage Emergency; and

WHEREAS, the Water Department staff is recommending implementation of Stage __ of the City's Water Shortage Contingency Plan; and

WHEREAS, on _____ the Board of Public Utilities recommended that the Council of the City of Santa Rosa adopt a resolution declaring a water shortage emergency, directing staff to implement a program of demand management as defined by Stage ___ of the City's Water Shortage Contingency Plan to realize community-wide water reduction of ___% and directing staff to utilize the Undesignated and Catastrophic Reserves to compensate for loss of revenue due to reduced water sales.

NOW, THEREFORE, BE IT RESOLVED that the Council of the City of Santa Rosa declares a water shortage emergency and directs staff to implement a program of demand management as defined by Stage __ of the City's Water Shortage Contingency Plan to realize community-wide water reduction of ____%.

BE IT FURTHER RESOLVED that the City Council directs staff to utilize the Undesignated Reserve and Catastrophic Reserve to compensate for loss of revenue due to reduced water sales.

IN COUNCIL DULY PASSED THIS _____ day of _____, 2021

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST: _____ APPROVED: _____

City Clerk

Mayor

APPROVED AS TO FORM:

_____

City Attorney

Appendix E

Draft Ordinance of the Council of the City of Santa Rosa Amending Section 14-04.015 of the Santa Rosa City Code, Revising the Water Shortage Rate and Excess Use Penalty~~ies~~ Structure~~s~~

DRAFT ORDINANCE OF THE COUNCIL OF THE CITY OF SANTA ROSA AMENDING SECTION 14-04.015 OF THE SANTA ROSA CITY CODE, REVISING THE WATER SHORTAGE RATE AND EXCESS USE PENALTY~~IES~~ STRUCTURE~~S~~

THE PEOPLE OF THE CITY OF SANTA ROSA DO ENACT AS FOLLOWS:

Section 1. Section 14-04.015 of the Santa Rosa City Code is amended to read in full as follows:

"**14-04.015 Water Shortage Rate Structure.**

At any time the Council of the City of Santa Rosa or the City Manager declares a Water Shortage Emergency and implements Water Shortage Charges ~~Stages 2 through 8~~ pursuant to its current, adopted Water Shortage Contingency Plan, the following water shortage rate structure will be applied to all potable water ~~services~~accounts:

(A) A water shortage rate charge (WSC) will be implemented for all potable water ~~services~~ accounts as follows:

Water Shortage Stage	Water Usage Charge
Stage 2	Current User Charge + 5% WSC
Stage 3	Current User Charge + 7.5% WSC
Stage 4	Current User Charge + 10% WSC
Stage 5	Current User Charge + 15% WSC
Stage 6	Current User Charge + 25% WSC
Stage 7	Current User Charge + 35% WSC
Stage 8	Current User Charge + 45% WSC

(B) During any water shortage emergency stage that requires existing customers to adhere to water allocations (water rationing), water use in excess of the water allocation for each service connection is prohibited. In addition to the WSC, an excess use penalty (EUP) for all water used above the ~~individual service allocations~~water allocation specified in the current, adopted Water Shortage Contingency Plan will be implemented for all potable water services as follows:

~~Water Shortage Stage~~	~~Excess Use Penalty~~	~~Excess Use Penalty~~
	~~101% to 150% of allocation~~	~~over 151% of allocation~~
~~Stage 5~~	~~Current User Charge + 10% penalty~~	~~Current User Charge + 20% penalty~~
~~Stage 6~~	~~Current User Charge + 25% penalty~~	~~Current User Charge + 50% penalty~~
~~Stage 7~~	~~Current User Charge + 40% penalty~~	~~Current User Charge + 80% penalty~~
~~Stage 8~~	~~Current User Charge + 50% penalty~~	~~Current User Charge + 100% penalty~~

Excess Use Over Allocation in thousand-gallon units (TGALs)	Penalty per TGAL			
	Stage 5	Stage 6	Stage 7	Stage 8
2 to 10	$ 5.00	$10.00	$20.00	$40.00
Over 10	$10.00	$20.00	$40.00	$80.00

Excess Use Penalty revenues are not intended to be used as general operating revenues during the emergency~~,~~ but may be used to: (1) offset the extraordinary costs of the water shortage emergency such as additional conservation support; (2) rebuild the Catastrophic Reserve; and/or (3) establish a rate stabilization fund for the post-emergency recovery.

Section 2. Environmental Determination. The Council finds that the adoption and implementation of this ordinance is exempt from the provisions of the California Environmental Quality Act in that the Council finds there is no possibility that implementation of this ordinance may have significant effects on the environment.

~~Section 2. The City Council, based on the reports, oral and written, of staff, the recommendations of the Board of Public Utilities, the other materials provided and considered, and the testimony and other evidence presented, finds that the changes in service rates and charges set forth above are not discriminatory or excessive, are sufficient under Section 54515 of the Government Code, and are required to meet estimated costs and operating expenses, including increased employee wages and fringe benefits, the cost of purchasing and/or leasing supplies, materials and equipment, financial reserve requirements and the costs of capital improvements, necessary to maintain and provide proper and adequate service to properties and premises served by the City's water utility, an enterprise system. Based on these findings, the City Council finds that the changes in rates and charges set forth in this ordinance are exempt from the provisions of the California Environmental Quality Act under section 15273 of the State CEQA Guidelines.~~

~~Section 3. Delinquent water service charges and all penalties thereon when recorded as provided in Chapter 14-04 of the Santa Rosa City Code and Chapter 6 of Part 1 of Division 2 of Title 5 of the Government Code shall constitute a lien upon the real property served.~~

Section ~~4~~ 3. Severability. If any section, subsection, sentence, clause, phrase, or word of this ordinance is for any reason held to be invalid and/or unconstitutional by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance.

Section ~~5~~ 4. Effective Date. This ordinance shall take effect on the 31st day following its adoption.

IN COUNCIL DULY PASSED THIS _____ day of _____, 2021

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST: _____ APPROVED: _____

City Clerk

Mayor

APPROVED AS TO FORM:

_____

City Attorney

Appendix F

Notices

Notices will be included in final version

Appendix G

Resolutions of the Council of the City of Santa Rosa Adopting the 2020 Urban Water Management Plan, ~~and~~the 2020 Water Shortage Contingency Plan, and the Amended 2020 Water Shortage Contingency Plan

Resolutions will be included in final version.

Appendix H

Local Hazard Mitigation Plan

The Local Hazard Mitigation Plan is available on the City of Santa Rosa's website at http://www.srcity.org/UWMP.