

Urban Water Shortage Contingency Plan 2010



City of
Santa Rosa
Utilities Department

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Section 1: Introduction

The City of Santa Rosa Urban Water Shortage Contingency Plan (Shortage Plan) was first adopted on February 11, 1992 and is updated periodically, at a minimum every five years. The Shortage Plan is a component of the City's Urban Water Management Plan, which is updated every five years. The Shortage Plan was first adopted in response to emergency legislation, California Assembly Bill 11X. Legislation has changed the requirements of water shortage contingency planning several times since the initial bill was passed. Current requirements are in Section 10632 of the California Water Code, the Urban Water Management Planning Act, which is provided as Appendix 3 to this document.

The City's 1992 Shortage Plan was first revised in 1996 with updated demand and financial data. In 2002, a more comprehensive revision was completed, which included updated demand projections, financial analysis, and rate structure design for each rationing stage; a change in the per capita allocations in Stages 2 through 4; and a change in the methodology for determining landscape allocations in Stages 2 through 4. In 2005, the revision updated the demand and financial data. In 2006, the revision added two sections to the document addressing minimum water supply and drought/emergency planning actions. This 2010 revision updates the demand projections and financial analysis; adds a new rationing stage and changes the per capita allocations in the Stages.

The City's Shortage Plan provides guidance on demand reduction strategies for the Santa Rosa system. Trigger points on the Russian River system, which in turn trigger the City's program, are determined by the Sonoma County Water Agency (Agency) and water shortage provisions for the Agency system are governed by the Restructured Agreement for Water Supply dated June 2006 (Restructured Agreement).

Section 2: City of Santa Rosa Water Supply

The City currently has three sources of existing water supply: 29,100 acre-feet per year (AFY) entitlement from the Agency; 2,300 AFY of groundwater from the City's wells; and approximately 410 AFY of recycled water from the City's Subregional System. In addition, the City has an aggressive water conservation program which reduces current demands and assures that future demands are efficient.

The City currently receives the majority of its potable water supply from the Agency under the provisions of the Restructured Agreement, which was executed in June 2006; approximately 95% of water delivered by the Agency is from surface water sources, with the remainder from groundwater. Santa Rosa holds an entitlement to 56.6 million gallons per day, peak month average with an annual volume limit of 29,100 AFY.

In addition to Agency supply, in July 2005, the City received permission from the California Department of Public Health (DPH) to use two of its groundwater wells, formerly permitted as standby emergency wells, for supply; this supply source is now

permitted for regular production and can provide up to 2,300 AFY to the City under normal conditions and approximately 1,550 AFY during dry year conditions.

Section 3: Previous Water Shortage Conditions

The contractual provisions of the Restructured Agreement dictate how water supply reductions will be administered by the Agency 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 further defined in the Water Shortage Allocation Methodology (Shortage Methodology), which was adopted by the Agency 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 implemented an aggressive water conservation program over the past 17 years and has one of the lowest per capita water uses among all the Agency water contractors.

Recent drought conditions in 2007 and 2008 have led to short-term water supply shortages, resulting in the Agency requesting a voluntary 15% reduction in water use during these dry conditions. In 2009, short-term water supply shortages resulted in the Agency implementing the Shortage Methodology and providing water allocations to its customers, including the City. In response to the Agency's implementation of the Shortage Methodology, the City implemented Stage 1 of the Shortage Plan and was able to successfully reduce water use to remain within the monthly water allocation provided by the Agency.

Section 4: Past, Current and Projected Demand

Santa Rosa is a community of over 163,000 people. Of the approximately 52,000 water connections, 91% service residential demand while the remaining 9% service commercial demand. Utility customers are segregated into the following large customer classes: single-family residential, multi-family residential, commercial and irrigation. The multi-family residential class can be further divided by the number of living units. In the commercial customer class, all utility customers have been classified according to the Standard Industrial Classification (SIC) system, which allows the commercial category to be sorted into sub-categories including: industrial, governmental institution, health care facility, and public safety.

Analysis of historic dry year conditions in the Sonoma County Water Agency 2010 Urban Water Management Plan indicates a reduction of up to 30% of Agency supply in a single dry year and no supply curtailment in a multiple dry year. Because allocation among the Agency's customers is determined by the Shortage Methodology of Section 3.5 of the Restructured Agreement, no water supply deficiency is expected for the City due to dry year conditions in either analysis.

Table 1 presents actual water deliveries for the City in 2010; however it should be cautioned that the 2010 water use is not representative of normal water use

characteristics for the City. From 2007 to 2010, the City’s water use was significantly affected by a number of factors described below:

- Drought conditions – In 2007 and 2008, dry year conditions caused the Agency to request voluntary 15% reductions in water use from all of the Agency’s water contractors. The Agency implemented significant public education and outreach campaigns asking all customers to reduce their water use. In response, the City requested customers to voluntarily reduce their water use, implemented additional public outreach, implemented a water watch patrol, provided new “water on request” cards to restaurants and “towel and linen” cards to hotels and motels, and developed a water wise kit which was provided to all single-family residential and dedicated irrigation customers. Water use was reduced by approximately 15%.
- Water Shortage Conditions – In 2009, drought conditions caused the Agency to implement their Shortage Methodology and provide monthly allocations to each of its water contractors, including the City. The Agency implemented even greater public education and outreach campaigns asking all customers to reduce their water use. In response, the City adopted Stage 1 of the City’s Shortage Plan, requesting customers to reduce their water use by 15%, prohibiting washing hard surfaces, requiring hose-end shut off nozzles on all garden hoses, and requiring restaurants to only serve water on request. The City implemented a significant public outreach and education program, increased the water watch patrol, and sent numerous customized letters to every customer informing them of the Stage 1 water requirements and providing information on ways to reduce their water use. Water use was reduced by approximately 25%.
- Economic Conditions – From 2007 to 2010, economic recession and high amounts of vacancy in existing residential and commercial customer accounts had a significant effect on water usage.

Lasting effects of the drought, water shortage and economic recession, as well as a cool summer, significantly affected the City’s 2010 water use and therefore, the City’s 2010 water use is not representative of normal water use characteristics for the City.

Customer Class	Water Demand (Acre-feet) ²	Number of Connections
Single-family	9,860	43,494
Multi-family	3,204	3,129
Commercial¹	2,713	2,887
Landscape	1,608	1,695
Total	17,385	51,205

¹ Includes Commercial, Industrial, Institutional, Health Care and Public Safety
² Demand totals do not include unaccounted for water loss, which is approximately 8%.

Because 2010 is not representative of normal water use characteristics, average

historical water use based on a 10-year average was used to determine the normal water use characteristics for purposes of the Shortage Plan analysis. The average water demand is representative of normal water use and is used throughout the Shortage Plan for determining demand reduction goals, consumption limits by customer class, as well as for conducting the revenue and expenditure impacts analysis. Table 2 summarizes the 10-year average historical water demand by customer class. Actual purchase and production of water would be approximately 8% higher than demand due to normal unaccounted for water losses.

Table 2		
Average Historical Water Use by Customer Class		
Customer Class	Average Water Demand 1997 - 2006 (Acre-Feet)²	Average Number of Connections 1997 – 2006
Single-Family Residential	12,526	39,530
Multi-Family Residential	3,457	2,905
Commercial ¹	3,674	2,729
Irrigation	2,608	1,554
Total	22,265	48,718
¹ Includes Commercial, Industrial, Institutional, Health Care and Public Safety.		
² Demand totals do not include unaccounted for water loss, which is approximately 8%.		

4.1 – ESTIMATED MINIMUM WATER SUPPLY FOR NEXT THREE YEARS

The estimated minimum water supply for the next three years assumes a multiple dry year condition based on the driest four-year historic sequence (1990 to 1993). As indicated in the Agency’s 2010 Urban Water Management Plan, no supply curtailment would result to the City from the Agency if the hydrologic conditions of the driest four-year historic sequence occurred today. Table 3 presents the estimated minimum water supply for the next three years, as well as the projected demands under normal conditions for the next three years. As shown, the estimated minimum water supply is sufficient to meet the projected water demands under normal conditions and no supply shortfall is projected.

Table 3			
Estimated Minimum Water Supply for the Next Three Years			
Supply Source	Projected Minimum Water Supply, Acre-Feet		
	2011	2012	2013
Sonoma County Water Agency ¹	29,100	29,100	29,100
City Groundwater	1,550	1,550	1,550
Recycled Water	410	410	410
Total Supply	31,060	31,060	31,060
Projected Water Demand ²	26,585²	26,737²	26,887²
Projected Supply Shortfall	No Shortfall Projected		

¹ Assumes no supply curtailment based on information provided in the Agency's 2005 UWMP.

² Demand totals are based on normal year conditions and do not include unaccounted for water loss, which is approximately 8%.

The methodology used for the demand projections for the next three years is based on normal water use characteristics and does not incorporate the effects of the conditions described in Section 4 above. Because of this methodology, the projections for the next three years included in Table 3 may be slightly higher than what may likely occur and represents the maximum demand the City anticipates will occur based on a strong economic recovery in the next three years.

Section 5: Emergency Planning Actions

In addition to responding to drought conditions, the City's Shortage Plan can be used to respond to emergency conditions that interrupt water supplies to the City. Water supplies may be interrupted in the future due to water supply contamination, major transmission pipeline break, regional power outage, or a natural disaster such as an earthquake. In the event of an emergency, the Utilities Department would respond as outlined in the City's current City of Santa Rosa Utilities Department Water System Emergency Response Plan. Actions that the City would take if these emergencies occurred today are outlined below.

5.1 NO WATER AVAILABLE FROM THE AGENCY

In the event that the Agency'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 the Agency for a period of time. In such a case, the City would need to rely on water from its distribution system storage facilities, Farmers Lane wells, and/or emergency wells.

If such an event were to occur, the City would need to implement one or more stages of the Shortage Plan to notify customers of the need to reduce water use until the Agency water supply could be restored.

5.2 AREA-WIDE ELECTRICAL POWER FAILURE

If an area-wide electrical power failure were to occur within the City's water service area, many of the City's pumping facilities could potentially be impacted. The City has stationary standby generators at 16 of its 20 booster pump stations. The other 4 booster pump stations either have receptacles for use with a portable generator or have outlets for bypass pumping with portable water pumpers. 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.

The Agency's facilities may also be vulnerable to power outages; however, most of the Agency facilities which serve the City have backup power provisions.

5.3 EARTHQUAKE

Water system infrastructure, including pump stations, storage tanks, and pipelines, can be damaged during a strong earthquake. The City's facilities have been constructed in accordance with the applicable building codes to minimize potential damage during an earthquake. However, it is expected that some facilities may be damaged as the result of a strong earthquake. The City has planned for this potential outage scenario by constructing system redundancy into its water system. The City has multiple storage facilities and looped distribution pipelines, to allow potentially damaged portions of the City's system to be quickly isolated and repaired.

Section 6: Stages of Action for Demand Reduction up to 50%

Demand reduction strategies will be employed at all stages of a water shortage emergency. This Section includes details of *Rationing Stages*, *Demand Reduction Goals*, *Consumption Limits*, *Prohibitions on Water Use*, and *Water Shortage Rate Structure*. The entire strategy for demand reduction is summarized in Appendix 1, the City's Water Shortage Action Plan.

6.1 RATIONING STAGES

The City has determined the rationing stages for response to reduced supply in a water shortage emergency. Table 4 details these rationing stages.

Table 4 (DWR Table 35) Water shortage contingency — rationing stages to address water supply shortages			
Stage No.	Water Supply Conditions	% Supply Shortage	Overall Demand Reduction Goal
Stage 1 - Voluntary	Up to 10% Reduction in Agency Water Supply	Up to 10%	10%
Stage 1 – Mandatory	11 – 20% Reduction in Agency Water Supply	11 - 20%	20%
Stage 2 – Moderate	21 – 30% Reduction in Agency Water Supply	21 - 30%	30%
Stage 3 – Severe	31 – 40% Reduction in Agency Water Supply	31 - 40%	40%
Stage 4 – Critical	41 – 50%+ Reduction in Agency Water Supply	41 - 50%+	50%+

6.2 DEMAND REDUCTION GOALS

Overall demand reduction will be achieved with different reduction goals in each user class. The following priorities have been established for use in developing demand reduction programs and allocations during a water shortage emergency. Priorities for use of available water, from highest to lowest priority, are:

- Health and Safety
- Commercial, Industrial and Governmental
- Existing Landscaping - especially trees and shrubs
- New Demand - projects without permits when shortage is declared

With these guidelines in mind, Table 5 details overall reduction goals by customer class for Stages 2 through 4 of the water shortage emergency. Reduction goals are based on a 10-year average water use, representing normal water demand. Reduction goals for single-family customers are based on per capita water allocation, plus an irrigation allocation (as further described below). For multi-family customers, reduction goals are based on per capita water allocation. For the commercial/industrial/government and Health Care Facilities/Public Safety customers, prior year demand is the basis for calculating demand reduction. For irrigation services, the allocation is based on plant type and evapotranspiration data.

Table 5 Average Demand and Reduction Goals by Customer Class				
Customer Class	Average Water Use 1997 - 2006 (AF)	Stage 2	Stage 3	Stage 4
		% Reduction	% Reduction	% Reduction
	Annual Demand	Annual Allocation	Annual Allocation	Annual Allocation
Single Family		31%	38%	56%
	12,526	8,643	7,766	5,511
Multiple Family		5%	14%	23%
	3,457	3,284	2,973	2,662
Commercial/ Industrial/ Government		15%	20%	30%
	3,266	2,776	2,613	2,286
Irrigation		39%	68%	90%
	2,608	1,591	835	261
Health Care Facilities/ Public Safety		5%	10%	15%
	408	388	367	347
		25%	35%	50%
Total (AF)	22,265	16,699	14,472	11,133

6.3 CONSUMPTION LIMITS

To achieve the overall reduction goals, a community-wide goal is assigned in Stage 1 – Voluntary and Stage 1 – Mandatory and allocations are determined for each customer within a customer class for Stages 2 through 4. Details of reduction strategies for each customer class at each reduction stage are as follows:

Stage 1 - Voluntary is a voluntary program with 10% overall reduction:

- Community-wide reduction is the goal; elimination of all waste; minimization of non-essential use; "water-on-request" restaurant program

Stage 1 - Mandatory is a mandatory program with 20% overall reduction:

- Community-wide reduction is the goal; all Stage 1-Voluntary requirements as well as a limitation on hours of irrigation for all customers

Stage 2 is a mandatory program with 30% overall reduction. Allocations are developed for each water service as follows:

- Single-family customers receive 58 gallons per capita day (gpcd) plus a moderate landscape allotment of 2,300 gallons per month from May through October
- Multi-family customers receive 58 gpcd plus a moderate landscape allotment if irrigation usage is not on a separate dedicated service
- Commercial/Industrial/Governmental receives 85% of previous 12 months' usage or of the most recent 12-month period with no water shortage restrictions in place
- Irrigation receives a water budget based on 61% of historical net evapotranspiration-based demand for the square footage of the irrigated area
- Health care and public safety receives 95% of previous 12 months' usage or of the most recent 12-month period with no water shortage restrictions in place

Stage 3 is a mandatory program with 40% overall reduction. Allocations are developed for each water service:

- Single-family customers receive 52 gpcd plus a minimal landscape allotment of 2,000 gallons per month from May through October
- Multi-family customers receive 52 gpcd plus a minimal landscape allotment if irrigation usage is not on a separate dedicated service
- Commercial/Industrial/Governmental receives 80% of previous 12 months' usage or of the most recent 12-month period with no water shortage restrictions in place
- Irrigation receives a water budget based on 32% of historical net evapotranspiration-based demand for the square footage of the irrigated area
- Health care and public safety receives 90% of previous 12 months' usage or of the most recent 12-month period with no water shortage restrictions in place

Stage 4 is a mandatory program with 50% overall reduction. Allocations are developed for each water service:

- Single and multi-family customers receive 47 gpcd with no landscape allotment
- Commercial/Industrial/Governmental receives 70% of previous 12 months' usage or of the most recent 12-month period with no water shortage restrictions in place
- Irrigation receives allotment only for mature trees and shrubs
- Health care and public safety receives 85% of previous 12 months' usage or of the most recent 12-month period with no water shortage restrictions in place

A summary of the consumption reduction methods are included in Table 6.

Table 6 (DWR Table 37) Water shortage contingency — consumption reduction methods		
Consumption Reduction Methods	Stage When Method Takes Effect	Projected Reduction (%)
Community wide reduction target established, minimization of non-essential uses and water on request program for restaurants	1 – Voluntary	10%
Limitation on irrigation hours	1 – Mandatory	20%
Allocations are given to each customer class	2	30 – 50%
New construction must offset new demand	2	30 – 50%

6.4 PROHIBITIONS ON WATER USE

Santa Rosa adopted a Water Waste Ordinance in 1999 which prohibits the following:

- Irrigation in such a manner that it runs off or over-sprays the irrigated area
- Leaks that are detected yet un-repaired

The Water Waste Ordinance states that water service will be discontinued for continued violation once notification has been made.

In addition to the prohibitions outlined in the Water Waste Ordinance, the following program of prohibited use is established for the Water Shortage Emergency condition:

Stage 1 Voluntary

- Hose-end shut-off nozzles are required on all garden and utility hoses
- Water served in restaurants on request only
- Washing sidewalks, patios, and other hard surfaces is prohibited unless required for public health and safety needs
- Using potable water for street washing is prohibited

Stage 1 Mandatory – All prohibitions established in previous stage plus:

- Irrigation limited to the hours of 8:00 pm to 6:00 am

Stage 2 - All prohibitions established in previous stage plus:

- Operating ornamental fountains is prohibited
- Filling new swimming pools is prohibited
- New construction must offset new demand by conserving the equivalent of the new demand within the community
- Recycled water must be used for construction dust control if recycled water is available and project is within a 1 mile radius of recycled water filling station

Stage 3 - All prohibitions established in previous stage plus:

- No water using landscape installation in new construction
- New construction must offset new demand by conserving two times the new demand within the community
- Filling or topping-off of existing swimming pools is prohibited

Stage 4 - All prohibitions established in previous stage plus:

- No water using landscape installation
- New construction must offset new demand by conserving three times the new demand within the community

A summary of the mandatory prohibitions is included in Table 7.

Table 7 (DWR Table 36) Water shortage contingency — mandatory prohibitions	
Examples of Prohibitions	Stage When Prohibition Becomes Mandatory
Water Waste Ordinance Prohibitions	During all water conditions
Using potable water for street washing	Stage 1 Voluntary
Hose end shut-off nozzles required	Stage 1 Voluntary
Water served in restaurants on request only	Stage 1 Voluntary
Washing sidewalks, patios and other hard surfaces prohibited except for health and safety reasons and certain construction purposes	Stage 1 Voluntary
Irrigation limited to hours of 8PM to 6AM	Stage 1 Mandatory
Prohibition on operating ornamental fountains	Stage 2
Prohibition on filling new swimming pools	Stage 2
New construction must offset water demand	Stage 2
Prohibition on installing water using landscape in new construction	Stage 3
New construction must offset water demand two to one	Stage 3
Prohibition on filling existing swimming pools	Stage 3
Prohibition on installing water using landscapes	Stage 4
New construction must offset water demand three to one	Stage 4

A customer will be found in violation of a prohibited use if the use continues after two official City written notifications. Remedies for violation of these prohibited actions are included in Section 6.6.

6.5 WATER SHORTAGE RATE STRUCTURE

The City’s water rate structure consists of a four-tiered water rate structure for Single-

Family Residential customers, a commodity rate structure for Multi-Family Residential and Commercial, Industrial and Institutional customers, and a water-budget based tiered water rate structure for Dedicated Irrigation customers. As of January 15, 2011, the water rate per 1,000 gallons is listed in Table 8. The water rate structure also includes monthly fixed service charges, which vary with the size of the water meter.

Table 8 Water Rates Effective 2011	
	Water Usage Charge (per 1,000 gallons)
Single Family Residential Tiered Rate	
Tier 1 (up to the sewer cap)	\$4.41
Tier 2 (above sewer cap to 8,000 gal.)	\$5.08
Tier 3 (8,001 to 30,000 gal. above sewer cap)	\$6.34
Tier 4 (over 30,000 gal. above sewer cap)	\$9.51
Multi-family Residential	
	\$4.86
Commercial & Industrial	
	\$4.86
Dedicated Irrigation Water-Budget Based Tiered Rate	
Tier 1 (up to 125% of water budget)	\$4.65
Tier 2 (126 to 200% of water budget)	\$6.34
Tier 3 (201% and over water budget)	\$9.51

Water rates during a shortage condition as defined in the following sections will be based on modifications to the current rate structure in place at the time of the declared emergency.

The City’s water rate structure is designed to encourage efficient water use, even during normal water supply conditions. This is achieved through a low fixed service charge and a relatively high usage charge 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 total water usage. A reduction in water usage can result in revenues not covering all fixed costs.

Changes to the water rate structure during each stage of rationing are designed to encourage customers to reduce water use commensurate with water allocations and reduction goals. In addition, the rate structure changes are also necessary to help protect the financial stability of the water system as water demands are reduced.

Three lines of defense are incorporated into the City’s water shortage financial strategy and rate structure:

1. The catastrophic reserve will be drawn down to absorb part of the financial deficit caused by a reduction in water rate revenues (due to lower water sales) that exceeds the reduction in operating costs.

2. All customers will be subject to an increased usage charge (Water Shortage Charge) in Stages 2 through 4 to encourage water conservation by all customers and help protect the financial condition of the water utility. The Water Shortage Charge (described below) is designed such that customers meeting reduction goals will have lower water bills than they do with normal usage.
3. Water service customers that exceed water allocations and do not meet reduction goals will be subject to additional Excess Use Charges during severe (Stage 3) and critical (Stage 4) periods. Revenues from Excess Use Charges will be used only for specified purposes.

Table 9 summarizes the charges and the Stage that they are applied.

Table 9 (DWR Table 38) Water shortage contingency — penalties and charges	
Penalties or Charges	Stage When Penalty Takes Effect
Water Shortage Charge - Increased usage charge to encourage water conservation	2
Excess Use Charge – Penalty for excess use above allocation	3

In Stage 1, there are no changes to the water rate structure. To compensate for loss of revenue from reduced water sales and increased staffing for the water shortage response effort, the Catastrophic Reserve may be employed in Stage 1. In the event of a water shortage, adoption of the Water Shortage Resolution (See Section 8: Implementation of the Shortage Plan) by the Santa Rosa City Council will allow the appropriation of funds from the Catastrophic Reserve.

In Stages 2 through 4, reduction in net revenue brought on by reduced water sales and increased costs for the water shortage response effort will be mitigated by both the Catastrophic Reserve and the introduction of a Water Shortage Charge (WSC) on each unit of water sold. A 10% WSC will be added to the current user charge on every unit of water sold (per 1,000 gallons) for all customer accounts beginning in Stage 2. The WSC will increase by 10% for each additional stage, resulting in a 20% WSC in Stage 3 and a 30% WSC in Stage 4. Beginning in Stage 3 and continuing in Stage 4, the tiered water user charges for Single-Family Residential and Dedicated Irrigation accounts are eliminated and the user charge for Multi-Family Residential and Commercial and Industrial accounts (the “uniform commodity rate”) is imposed on all customer accounts.

The WSC is designed to recover a portion of the cost of the revenue from the shortfall from the entire community, and is designed such that a typical customer’s bill will not change significantly even though the rate has increased (this assumes the typical customer will reduce use at least at the level of the WSC.) The WSC will increase with each stage according to Table 10.

Table 10		
Water Shortage Charge (WSC) for All Water Sold – Stages 2 through 4		
WATER SHORTAGE CHARGE - STAGE 2 MODERATE		
Account Type	Water Shortage Charge Stage 2 - Moderate (\$ Per Thousand Gallons)	Example with 2011 water rate (\$ Per Thousand Gallons)
Single Family Residential	Tier 1 Rate Plus 10% Tier 2 Rate Plus 10% Tier 3 Rate Plus 10% Tier 4 Rate Plus 10%	Tier 1 \$4.85 Tier 2 \$5.59 Tier 3 \$6.97 Tier 4 \$10.46
Dedicated Irrigation Accounts	Tier 1 Rate Plus 10% Tier 2 Rate Plus 10% Tier 3 Rate Plus 10%	Tier 1 \$5.12 Tier 2 \$6.97 Tier 3 \$10.46
Multi-Family Residential (2 units or more)	Commodity Rate Plus 10%	\$5.35
Commercial, Industrial, Government, Health Care, Safety	Commodity Rate Plus 10%	\$5.35
WATER SHORTAGE CHARGE - STAGE 3 SEVERE		
Account Type	Water Shortage Charge Stage 3 - Severe (\$ Per Thousand Gallons)	Example with 2011 water rate (\$ Per Thousand Gallons)
Single Family Residential	Commodity Rate Plus 20%	\$5.83
Dedicated Irrigation Accounts	Commodity Rate Plus 20%	\$5.83
Multi-Family Residential (2 units or more)	Commodity Rate Plus 20%	\$5.83
Commercial, Industrial, Government, Health Care, Safety	Commodity Rate Plus 20%	\$5.83
WATER SHORTAGE CHARGE - STAGE 4 CRITICAL		
Account Type	Water Shortage Charge Stage 4 - Critical (\$ Per Thousand Gallons)	Example with 2011 rate (\$ Per Thousand Gallons)
Single Family Residential	Commodity Rate Plus 30%	\$6.32
Dedicated Irrigation Accounts	Commodity Rate Plus 30%	\$6.32
Multi-Family Residential (2 units or more)	Commodity Rate Plus 30%	\$6.32
Commercial, Industrial, Government, Health Care, Safety	Commodity Rate Plus 30%	\$6.32

In addition to the WSC, an inclining rate designed to reward customers for staying within their allotment and to assess Excess Use Charges (EUC) for water use over the allotment will be adopted at Stages 3 and 4. In Stage 3, the EUC consists of a 50% surcharge for use 101 – 150% above consumption limits and a 100% surcharge for use over 150% of consumption limits for all customer accounts. In Stage 4, the EUC

consists of a 100% surcharge for use 101 – 150% above consumption limits and a 200% surcharge for use over 150% of consumption limits for all customer accounts. The EUC will be designed to reflect the structure illustrated in Table 11.

Table 11	
Excess Use Charge (EUC) for Water Used in Excess of Allotment – Stages 3 and 4	
Water Use Compared to Allotment	Excess Use Charge
Water use up to 100% of allotment	Commodity rate with WSC per Table 9
Water use 101% to 150% of allotment	Stage 3 – Commodity rate with WSC plus 50% EUC Stage 4 - Commodity rate with WSC plus 100% EUC
Water use over 150% of allotment	Stage 3 – Commodity rate with WSC plus 100% EUC Stage 4 - Commodity rate with WSC plus 200% EUC

EUC 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.

Table 12 summarizes the water shortage rate structure for each stage of rationing based on the current (2011) water rates.

Table 12 Water Shortage Rate Structure (2011)						
	Normal Supply	Stage 1: Voluntary (10% Shortage)	Stage 1: Mandatory (20% Shortage)	Stage 2: Moderate (30% Shortage)	Stage 3: Severe (40% Shortage)	Stage 4: Critical (50% Shortage)
Monthly Service Charge (\$/month)¹						
5/8" meter	\$ 8.35	\$ 8.35	\$ 8.35	\$ 8.35	\$ 8.35	\$ 8.35
1" meter	\$ 15.21	\$ 15.21	\$ 15.21	\$ 15.21	\$ 15.21	\$ 15.21
1 1/2" meter	\$ 29.07	\$ 29.07	\$ 29.07	\$ 29.07	\$ 29.07	\$ 29.07
2" meter	\$ 48.86	\$ 48.86	\$ 48.86	\$ 48.86	\$ 48.86	\$ 48.86
3" meter	\$ 114.27	\$ 114.27	\$ 114.27	\$ 114.27	\$ 114.27	\$ 114.27
4" meter	\$ 194.40	\$ 194.40	\$ 194.40	\$ 194.40	\$ 194.40	\$ 194.40
6" meter	\$ 425.58	\$ 425.58	\$ 425.58	\$ 425.58	\$ 425.58	\$ 425.58
Water Usage Rates (\$/1,000 gal.)²						
Single Family Residential	Tier 1	\$ 4.41	\$ 4.41	\$ 4.41	\$ 4.85	
	Tier 2	\$ 5.08	\$ 5.08	\$ 5.08	\$ 5.59	
	Tier 3	\$ 6.34	\$ 6.34	\$ 6.34	\$ 6.97	
	Tier 4	\$ 9.51	\$ 9.51	\$ 9.51	\$ 10.46	
Dedicated Irrigation	Tier 1	\$ 4.65	\$ 4.65	\$ 4.65	\$ 5.12	
	Tier 2	\$ 6.34	\$ 6.34	\$ 6.34	\$ 6.97	
	Tier 3	\$ 9.51	\$ 9.51	\$ 9.51	\$ 10.46	
Multi-Family Residential	\$ 4.86	\$ 4.86	\$ 4.86	\$ 5.35		
Non-Residential	\$ 4.86	\$ 4.86	\$ 4.86	\$ 5.35		
All Water Customers³	Tier 1 - Up to 100% of water allotment				\$ 5.83	\$ 6.32
	Tier 2 - From 100% to 150% of water allotment				\$ 8.75	\$ 11.66
	Tier 3 - Over 150% of water allotment				\$ 17.50	\$ 26.24
Water Shortage Rate Surcharges³						
Water Shortage Charge				10%	20%	30%
Tier 2 Excess Use Charge					50%	100%
Tier 3 Excess Use Charge					100%	200%
¹ Monthly water service charges are unaffected by water shortage rate changes.						
² No changes to water usage rates occur during Stage 1 - Voluntary and Stage 1 - Mandatory conditions. During Stage 2 - Moderate conditions the water usage rates are increased by the amount of the water shortage surcharge. The basis water usage structure for each customer class is unchanged through Stage 2 - Moderate conditions.						
³ During Stage 3 - Severe and Stage 4 - Critical conditions the water usage rate structure changes to an allotment for each customer (as described). Water shortage charges apply in these stages, and excess use charges apply to usage above the allotment, as specified						

6.6 VIOLATIONS OF WATER USE RESTRICTIONS AND REPEATED EXCESS USE

Any customer who exceeds the established allotment for three consecutive months, or

exceeds the established allotment for six months within a twelve month period, or violates one or more prohibited uses, may, at the discretion of the Director of Utilities, be subject to any of the following actions:

- At the customer's expense, undergo a complete site water audit and install certain water efficient fixtures
- Installation of a flow reducing device at the water meter
- Disconnection of water service and payment of a designated fee for reconnection of the water service

6.7 VARIANCE PROCEDURES

This Shortage Plan is designed to place the responsibility for managing our water resource during a water shortage emergency on the entire community. Care has been taken in the design of the Shortage Plan not to penalize any customer who has undertaken conservation measures in the past for having saved water on an ongoing basis. Furthermore, any customer meeting water use reduction goals by limiting water use to defined allocations will be able to avoid paying Excess Use Charges.

Any customer who feels their established allotment is unfair may apply to the City for a reassessment. Variances will be granted, on a case-by-case basis, at the discretion of the Director of Utilities. The following conditions are among those that may be given consideration in the variance process:

- Water uses that support public health and safety
- Non-residential water customers (whose allotment is based on previous consumption) who can demonstrate that water efficient hardware and conservation practices were in place prior to the water shortage emergency
- Water used for mature trees for which an inadequate allocation has been made

Section 7: Analysis of Revenue and Expenditure Impacts

Table 13 details the City Water Utility's projected annual revenue and expenditure status (based on a normalized budget and water supply/demand condition for FY 11-12) in non-shortage conditions and at each stage in the water shortage program.

**Table 13
Impact of Water Shortage on Revenues and Expenditures (FY11-12)**

	Normal Supply ¹	Stage 1: Voluntary (10% Shortage)	Stage 1: Mandatory (20% Shortage)	Stage 2: Moderate (30% Shortage)	Stage 3: Severe (40% Shortage)	Stage 4: Critical (50% Shortage)
Water Sales (AF) -->	22,265	20,039	17,812	15,586	13,359	11,133
Sources of Funds						
Service Charge Revenues	6,400,000	6,400,000	6,400,000	6,400,000	6,400,000	6,400,000
Usage Charge Revenues ²	35,200,000	31,700,000	28,200,000	24,600,000	21,100,000	17,600,000
Water Shortage Revenues ³				2,460,000	4,220,000	5,280,000
Other Operating Revenues	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000
Total Sources of Funds	43,500,000	40,000,000	36,500,000	35,360,000	33,620,000	31,180,000
(% or normal)		92%	84%	81%	77%	72%
Uses of Funds						
Purchase of Water	15,300,000	13,770,000	12,240,000	10,710,000	9,180,000	7,650,000
Water Administration	5,800,000	5,800,000	5,800,000	5,800,000	5,800,000	5,800,000
Water Maintenance	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000
Water Operations	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
Electricity for Pumping ⁴	900,000	810,000	720,000	630,000	540,000	450,000
Water Quality	600,000	600,000	600,000	600,000	600,000	600,000
Water Conserv.& Demand Mgmt. ⁵	500,000	600,000	700,000	800,000	900,000	1,000,000
Debt Service	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
O&M Projects	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
Transfers for Capital Projects ⁶	13,000,000	12,000,000	11,000,000	10,000,000	9,000,000	8,000,000
Total Uses of Funds	43,500,000	40,980,000	38,460,000	35,940,000	33,420,000	30,900,000
(% or normal)		94%	88%	83%	77%	71%
Surplus/(Deficit) in Operations		(980,000)	(1,960,000)	(580,000)	200,000	280,000
Catastrophic Reserve						
Available Balance ⁷	4,400,000	4,400,000	4,400,000	4,400,000	4,400,000	4,400,000
Excess Use Charge Revenues ⁸						
Used to Cover Oper. Deficit ⁹	-	(980,000)	(1,960,000)	(580,000)	-	-
Ending Balance	4,400,000	3,420,000	2,440,000	3,820,000	4,400,000	4,400,000
<i>(1) Reflects estimated FY 11-12 revenues and expenses under normal budgetary, water supply, and economic conditions, as a basis for water shortage financial analysis.</i>						
<i>(2) Water usage charge revenue would decline in proportion to reduced water usage.</i>						
<i>(3) Water shortage charge would be imposed in Stages 2, 3, and 4 to limit the operating deficit.</i>						
<i>(4) Water purchase costs and pumping energy costs would decline in proportion to reduced water usage.</i>						
<i>(5) Water conservation and demand management costs would increase with each stage of shortage.</i>						
<i>(6) Funding for the capital program would be restricted beginning with Stage 1 - Mandatory and escalate through higher stages.</i>						
<i>(7) Assumes Catastrophic Reserve would be fully funded at outset of water shortage.</i>						
<i>(8) Excess Use Charges would be imposed in Stages 3 and 4, but are assumed to generate no revenue for financial analysis purposes. Any Excess Use Charge Revenue received would be used to replenish the Catastrophic Reserve and fund conservation activities.</i>						
<i>(9) Catastrophic Reserve would be used to offset any operational deficit.</i>						

Customers who reduce their water use per the consumption limits should expect to see a decrease in the water portion of their monthly utility bill. Table 14 summarizes a sample water bill (not including wastewater fees) for an average Single Family Residential account that uses water per the consumption limits compared to a sample bill for an average Single Family Residential account that does not reduce their water use per the consumption limits.

Table 14 Sample Single Family Residential Charges							
Shortage Stage	Single Family Reduction Goal	Monthly Water Use (1,000 gal.)	Monthly Service Charge	Water Usage Charge	Water Shortage Charge	Excess Use Charge	Total Water Bill (Wastewater Fees Not Included)
Average Single Family Customer Meeting Reduction Goals¹							
Normal	0%	12	\$ 8.35	\$ 58.28	\$ -	\$ -	\$ 66.63
Stage 1 - Voluntary	10%	11	\$ 8.35	\$ 53.20	\$ -	\$ -	\$ 61.55
Stage 1 - Mandatory	20%	10	\$ 8.35	\$ 48.12	\$ -	\$ -	\$ 56.47
Stage 2 - Moderate	29%	9	\$ 8.35	\$ 43.04	\$ 4.30	\$ -	\$ 55.69
Stage 3 - Severe	40%	3.5	\$ 8.35	\$ 20.41	\$ 4.08	\$ -	\$ 32.84
Stage 4 - Critical	57%	1.4	\$ 8.35	\$ 8.85	\$ 2.65	\$ -	\$ 19.85
Average Single Family Customer With No Water Use Reduction¹							
Normal	0%	12	\$ 8.35	\$ 58.28	\$ -	\$ -	\$ 66.63
Stage 1 - Voluntary	10%	12	\$ 8.35	\$ 58.28	\$ -	\$ -	\$ 66.63
Stage 1 - Mandatory	20%	12	\$ 8.35	\$ 58.28	\$ -	\$ -	\$ 66.63
Stage 2 - Moderate	29%	12	\$ 8.35	\$ 58.28	\$ 5.83	\$ -	\$ 72.46
Stage 3 - Severe	40%	12	\$ 8.35	\$ 69.98	\$ 14.00	\$ 58.26	\$ 150.59
Stage 4 - Critical	57%	12	\$ 8.35	\$ 75.82	\$ 22.74	\$ 187.36	\$ 294.27

¹ Assumes sewer cap of 4,000 gallons , and three-person household with summertime irrigation.

Section 8: Implementation of the Shortage Plan

At the time of a water shortage emergency, the Santa Rosa City Council will adopt a Water Shortage Resolution. A draft Water Shortage Emergency Resolution is found in Appendix 2. With Stages 2 through 4, a Water Shortage Emergency Ordinance will also be adopted.

In the event that a Water Shortage Emergency occurs and the City Council cannot assemble to adopt the Water Shortage Emergency Resolution, the Director of Utilities is

authorized to implement the appropriate stage, based on the reduction in water supply, of the Shortage Plan. The Director of Utilities' determination 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 adopt the Water Shortage Resolution.

Section 9: Monitoring Procedures

Stage 1 – Voluntary and Stage 1 – Mandatory – Monthly delivery records from the Agency meters and from local groundwater sources, if in use, will be reported to the Director of Utilities or the Director's designee. If overall reduction goals are not met, the Director may notify the Board of Public Utilities and more aggressive measures can be implemented.

Stages 2 through 4 - Weekly delivery figures from the Agency meters and local groundwater sources, if in use, and monthly consumption data from the City's Utility Billing Division will be reported to the Director of Utilities or the Director's designee. If reduction goals are not met, the Director will notify the Board of Public Utilities and more aggressive action will be taken.

Section 10: Public Noticing and Adoption

The City prepared the first Shortage Plan during December 1991 and January 1992. The Board of Public Utilities adopted the Shortage Plan on February 6, 1992. The Santa Rosa City Council adopted the Shortage Plan on February 11, 1992. The Shortage Plan was updated in data areas only in 1996 and reviewed by the Board of Public Utilities Water Conservation Subcommittee. The 2002 revision was reviewed in a public hearing before the Santa Rosa Board of Public Utilities. The City Council adopted the Shortage Plan on May 21, 2002.

The 2005 revision was updated in data areas only and reviewed in a public hearing before the Santa Rosa Board of Public Utilities on May 19, 2005, and was recommended for adoption by the Santa Rosa City Council on that date. The City Council adopted the Shortage Plan on June 7, 2005.

The 2006 revision was updated as part of the adoption of the City's 2005 Urban Water Management Plan. The revision was updated by adding Section 4 to the document and was reviewed by the Board of Public Utilities Water Conservation Subcommittee in May 2006. The 2006 Shortage Plan was reviewed in a public hearing before the Santa Rosa Board of Public Utilities on June 15, 2006, and was recommended for adoption by the Santa Rosa City Council on that date. The City Council adopted the Shortage Plan on June 27, 2006 as part of the adoption of the City's 2005 Urban Water Management Plan.

In 2009, the Santa Rosa City Council enacted Stage 1 of the Shortage Plan on February 24, 2009 via Resolution No. 27308. Santa Rosa's customers were successful in the implementation of Stage 1, achieving savings above and beyond the 15%

reduction requested. The Santa Rosa City Council rescinded Stage 1 of the Shortage Plan on October 3, 2009 via Resolution No. 27492.

This 2010 revision was updated as part of the update of the City's 2010 Urban Water Management Plan. This revision was updated by adding a new rationing stage and updating the demand projections, per capita allocations, and financial analysis. The 2010 Shortage Plan was reviewed by the Board of Public Utilities Water Conservation Subcommittee in numerous meetings in 2010 and 2011. The 2010 Shortage Plan was reviewed in a public hearing before the Santa Rosa Board of Public Utilities on June 2, 2011, and was recommended for adoption by the Santa Rosa City Council on that date.

The City Council adopted the Shortage Plan on June 14, 2011 as part of the adoption of the City's 2010 Urban Water Management Plan.

Appendices

City of Santa Rosa - Water Shortage Action Plan 2010

Stage	Utility Department Actions	Customer Actions	Comments
<p>Stage 1 - Voluntary: 10 percent overall reduction.</p>	<ol style="list-style-type: none"> 1. Adopt resolution: <ul style="list-style-type: none"> • Requesting voluntary water conservation with non-allotment based cut-back goals for all user classes. • Prohibiting water waste and reducing all non-essential uses. 2. Initiate public information campaign: <ul style="list-style-type: none"> • Prepare and disseminate educational brochures, bill inserts, etc. • Disseminate technical information to specific customer types. • Set up public information booths urging water conservation and showing ways the public can save water. • Coordinate media outreach program; issue news releases to the media. • Explain other stages and forecast future actions. 3. Increase City support: <ul style="list-style-type: none"> • Add temporary position to staff phone lines. • Initiate patrol for water waste violations. 4. Prepare for future stages: <ul style="list-style-type: none"> • Prepare for initiation of rationing stages. • Update people per household information for residential sector for per capita allotments. 	<ol style="list-style-type: none"> 1. Implement voluntary water use reductions. 2. Adhere to water shortage resolution. 3. Become aware of possible further restriction. 	<p>Voluntary program with community-wide reduction goals.</p> <p>Strong public information campaign.</p> <p>Emphasis on elimination of waste and increased awareness.</p> <p>Hose-end shut-off nozzles required on all garden and utility hoses.</p> <p>Hosing off hard surfaces prohibited unless required for public health and safety.</p> <p>Using potable water for street washing prohibited.</p> <p>A “Water-on-request” restaurant program.</p>

Stage	Utility Department Actions	Customer Actions	Comments
<p>Stage 1 - Mandatory: 20 percent overall reduction.</p>	<ol style="list-style-type: none"> 1. Adopt resolution: <ul style="list-style-type: none"> • Requesting voluntary water conservation with non-allotment based cut-back goals for all user classes. • Limiting hours of irrigation for all customers and reducing all non-essential uses. 2. Initiate public information campaign: <ul style="list-style-type: none"> • Prepare and disseminate educational brochures, bill inserts, etc. • Send out information on irrigation hour limitation. • Disseminate technical information to specific customer types. • Set up public information booths urging water conservation and showing ways the public can save water. • Coordinate media outreach program; issue news releases to the media. • Explain other stages and forecast future actions. 3. Increase City support: <ul style="list-style-type: none"> • Add temporary position to staff phone lines. • Initiate patrol for water waste violations. 4. Prepare for future stages: <ul style="list-style-type: none"> • Prepare for initiation of rationing stages. • Update people per household information for residential sector for per capita allotments 	<ol style="list-style-type: none"> 1. Implement voluntary water use reductions. 2. Adhere to water shortage resolution. 3. Become aware of possible further restriction. 	<p>Voluntary program, community-wide reduction goals.</p> <p>Strong public information campaign.</p> <p>Emphasis on elimination of waste and increased awareness.</p> <p>Irrigation limited to hours of 8 PM to 6 AM.</p> <p>Hose-end shut-off nozzles required on all garden and utility hoses.</p> <p>Hosing off hard surfaces prohibited unless required for public health and safety.</p> <p>Using potable water for street washing prohibited.</p> <p>“Water-on-request” restaurant program.</p>

Stage	Utility Department Actions	Customer Actions	Comments
<p>Stage 2 - Moderate: 30 percent overall reduction.</p>	<p>In addition to Stage 1- Voluntary and Stage 1- Mandatory:</p> <ol style="list-style-type: none"> 1. Adopt rationing ordinance: <ul style="list-style-type: none"> • Assigning allotment to each water service: residential based on per capita allotment plus landscape; irrigation only based on ETo water budget; non-residential based on reduction from previous consumption. • Implementing Water Shortage Charge (WSC). • Expanding prohibited uses and developing penalty structure for waste violations. • Defining criteria and administrative procedures for variances. 2. Intensify public info campaign: <ul style="list-style-type: none"> • Notify each service of allotment goals. • Make site surveys available to all customers. 3. Increase City support: <ul style="list-style-type: none"> • Establish Shortage Response Center. • Appoint variance officer and administer variance program for all user classes. • Increase water waste patrol and audit support. 	<ol style="list-style-type: none"> 1. Adhere to allotment for 30 percent overall reduction: <ul style="list-style-type: none"> • Single Family - 58 gpcd, plus landscape allotment of 2,300 gallons per month May-Oct. • Multiple Family - 58 gpcd, plus moderate landscape allotment. • Commercial/Industrial/ Governmental - 85 % of previous 12 months' usage (15% reduction). • Irrigation - 61% of ET based water budget. • Health Care Facilities/ Public Safety - 95% of previous 12 months' usage (5% reduction). 2. Request variance where required. 3. Eliminate all prohibited uses. 	<p>Mandatory program with allotments for each service.</p> <p>Close tracking and feedback to community.</p> <p>Restricted uses include:</p> <ul style="list-style-type: none"> • operation of ornamental fountains prohibited. • filling new swimming pools prohibited. <p>New development must offset water demand.</p> <p>Recycled water must be used for construction dust control if available and project is within a 1-mile radius of a recycled water filling station.</p>

Stage	Utility Department Actions	Customer Actions	Comments
<p>Stage 3 - Severe: 40 percent overall reduction.</p>	<p>In addition to Stage 2:</p> <ol style="list-style-type: none"> 1. Intensify ordinance requirements: <ul style="list-style-type: none"> • Prohibit installation of landscapes in new construction. • Require new construction to offset two times the new demand through upgrades to existing homes and businesses (toilet replacements, etc.). • Implement Excess Use Charge (EUC) in addition to WSC. 2. Intensify public information campaign: <ul style="list-style-type: none"> • Promote participation in new construction offset program. 3. Staffing: <ul style="list-style-type: none"> • Expand Shortage Response Center, water waste patrol and audit effort. 	<p>In addition to Stage 2:</p> <ol style="list-style-type: none"> 1. Adhere to allotment for 40 percent overall reduction: <ul style="list-style-type: none"> • Single Family - 52 gpcd, plus landscape allotment of 2,000 gallons per month May-Oct. • Multiple Family - 52 gpcd, plus minimal landscape allotment. • Commercial/Industrial/ Governmental - 80% of previous 12 months' usage (20% reduction). • Irrigation - 32% of ET based budget. • Health Care Facilities/ Public Safety - 90% of previous 12 months' usage (10% reduction). 2. Request variance when required. 3. Eliminate all prohibited uses. 	<p>Mandatory program with minimal landscape allotments.</p> <p>Penalties for excess usage.</p> <p>Prohibit uses from Stage 2 plus:</p> <ul style="list-style-type: none"> • New construction program - offset twice the new demand. • No water using landscape installation in new construction. • Filling or topping off of existing swimming pool is prohibited.

Stage	Utility Department Actions	Customer Actions	Comments
<p>Stage 4 - Critical: 50 percent overall reduction.</p>	<p>In addition to Stage 3:</p> <ol style="list-style-type: none"> 1. Intensify ordinance requirements: <ul style="list-style-type: none"> • Prohibit installation or replanting of any landscaping. • Requiring new construction to offset three times the new demand through upgrades to existing homes and businesses; toilet replacement, etc. • Continue WSC and EUC. 2. Intensify public information campaign. 3. Expand Drought Response Center, water waste patrol and audit effort. 	<ol style="list-style-type: none"> 1. Adhere to allotment for 50 percent overall reduction: <ul style="list-style-type: none"> • Single Family - 47 gpcd, no landscape allotment. • Multiple Family - 47 gpcd, no landscape allotment. • Commercial/Industrial/ Governmental - 70% of previous 12 months' usage (30% reduction). • Irrigation - minimal allotment – for mature trees and shrubs only. • Health Care Facilities/ Public Safety - 85% of previous 12 months' usage (15% reduction). 2. Request variance where required. 3. Eliminate all prohibited uses. 	<p>Mandatory program with no landscape allotments.</p> <p>Severe penalties for excess usage.</p> <p>Prohibited uses from Stage 3 plus:</p> <ul style="list-style-type: none"> • New construction offset program – offset three times new demand. • No water using landscape installation in new construction.

DRAFT WATER SHORTAGE EMERGENCY RESOLUTION

RESOLUTION OF THE COUNCIL OF THE CITY OF SANTA ROSA DECLARING A WATER SHORTAGE EMERGENCY, IMPLEMENTING STAGE ___ OF THE CITY'S URBAN WATER SHORTAGE CONTINGENCY PLAN REQUESTING CUSTOMERS TO _____ REDUCE WATER USE BY _____%, AND AUTHORIZING UTILIZATION OF THE UTILITY'S CATASTROPHIC RESERVE.

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

WHEREAS the Sonoma County Water Agency (Agency) 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 County Water Agency has reduced delivery to the City and all prime contractors by _____%; and

WHEREAS, the City of Santa Rosa has the authority and responsibility to adopt water demand reduction measures within its area of service; and

WHEREAS, the City of Santa Rosa has the authority to employ the Catastrophic Reserve during a Water Shortage Emergency; and

WHEREAS, the Utilities Department staff is recommending implementation of Stage ___ of the City's Urban 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 Urban Water Shortage Contingency Plan to realize community-wide water reduction of ___% and directing staff to utilize the Catastrophic Reserve 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 Urban Water Shortage Contingency Plan to realize community-wide water reduction of _____%.

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

IN COUNCIL DULY PASSED this _____ day of _____, 20____

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST: _____
City Clerk

APPROVED: _____
Mayor

APPROVED AS TO FORM:

City Attorney

California Water Code Section 10632 Urban Water Management Planning

Water Shortage Contingency Analysis

10632. The plan shall provide an urban water shortage contingency analysis, which includes each of the following elements, which are within the authority of the urban water supplier:

(a) Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions which are applicable to each stage.

(b) An estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency's water supply.

(c) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.

(d) Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.

(e) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.

(f) Penalties or charges for excessive use, where applicable.

(g) An analysis of the impacts of each of the actions and conditions described in subdivisions (a) to (f), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.

(h) A draft water shortage contingency resolution or ordinance.

(i) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.