Water Shortage Contingency Plan

City of Riverside Public Utilities Department

2021

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Introduction

This document represents the Water Shortage Contingency Plan (WSCP) adopted by the City of Riverside Public Utilities Department (RPU). The document follows the structure recommended in guidance documents prepared by the California Department of Water Resources (DWR). The numbering of Sections 1 through 12 corresponds with the numbered sections in the UWMP Guidebook.

RPU's 2010 Urban Water Management Plan (UWMP) included a WSCP and three supporting appendices:

- RPU Water Rule #9 (Shortage of Water Supply and Interruption of Delivery, also known as the Water Shortage Ordinance)
- RPU Water Rule #15 (Water Waste)
- A draft Water Conservation Ordinance that expanded on the Water Shortage Ordinance and was recommended for approval by the City's Board of Public Utilities after the preparation of the 2010 UWMP. The Water Conservation Ordinance amended the Riverside Municipal Code (RMC) Title 14 and included a detailed description of unreasonable uses of water, RPU's Water Conservation Program, responses to water shortage emergencies, and enforcement and severability.

In July of 2014, the City Council adopted revisions to the City's Water Conservation Ordinance, as set forth in RMC Chapter 14.22, and adopted a resolution implementing Stages 1 and 2 of the City's Water Conservation Ordinance. The City's revisions to Chapter 14.22 changed Stage 2 restrictions from voluntary to mandatory. The City also limited non-agricultural landscape watering to four days in Stage 2 and decreased the non-agricultural landscape watering to three days in Stage 3.

In June of 2015, the City Council adopted additional changes to the Water Conservation Ordinance. The changes included additional restrictions on irrigation water use and an updated enforcement policy. The City also adopted a resolution implementing Stages 1, 2, and 3 of the Water Conservation Ordinance.

In 2018, new legislation expanded the required elements of a WSCP. RPU has prepared this updated WSCP to meet these requirements and is adopting it alongside its 2020 UWMP.

This plan addresses actions that RPU would take as a wholesale supplier and as a retail supplier.

The WSCP is a separate document from the UWMP. RPU will continue to monitor the effectiveness of this WSCP, and if the need arises to modify this plan, RPU will follow the update procedures described in Section 12.

1.0 Water Supply Reliability Analysis

This section summarizes the supply reliability analysis presented in the UWMP and highlights key issues that could create a shortage condition.

RPU's supplies generally have a high degree of reliability. RPU's primary source of supply is local groundwater. RPU has fixed extraction rights under the Western-San Bernardino Judgment, based upon a five-year rolling average. RPU has historically under-produced its fixed rights. Should a drought increase demand, RPU has the capacity and rights to increase pumping to maximize its fixed extraction rights in that drought year or extended drought period. RPU is able to meet current demands with local groundwater production. As an additional backup supply source, RPU has access to imported water through Western Municipal Water District (WMWD). RPU is also able to receive water through an interconnection with Norco during an emergency.

Chapter 7 of RPU's UWMP presents a supply reliability analysis for a five-year dry period. This analysis shows that RPU could continue to meet demands without the use of imported water. Although that analysis demonstrates that RPU's urban water supply is reliable, there are potential issues that could create a shortage condition. These include:

- An extended drought more severe than historic events, possibly impacted by climate change
- An extended and wide-spread power outage caused by a natural disaster or malevolent acts

- A regional emergency such as a hazardous chemical spill or a terrorist attack
- Regulatory mandates to reduce water use

Water shortage contingency planning provides a way to plan for these risks and anticipate actions that should be implemented to manage the impacts. This plan describes how RPU intends to respond to such shortage events.

2.0 Annual Water Supply and Demand Assessment Procedures

RPU will be required to prepare an Annual Water Supply and Demand Assessment, referred to by DWR as the Annual Assessment, and submit it to DWR each year, beginning July 1, 2022. The Annual Assessment is intended to meet requirements of Water Code Section 10632.1 and present an assessment of the likelihood of a water shortage occurring during the next 12 months. This section of the WSCP outlines the procedures that RPU will use to prepare the Annual Assessment. The procedures defined in this section will allow RPU to follow a consistent annual procedure for making the determination of whether to activate the WSCP.

2.1 Decision Making Process

RPU will use the following procedures in preparing the Annual Assessment.

1. In January and February of each year, RPU staff will review available data related to anticipated supplies and demands. RPU staff will coordinate with WMWD and the City of Norco on the regional outlook for water supply reliability.
2. In April of each year, RPU staff will present a recommendation to the RPU Board of Directors for approval. The Board will approve the determination of supply reliability and will take actions to implement shortage response actions, if needed. The Board will provide public notice of a hearing to consider changes in the implementation of shortage response actions.
3. In May of each year, RPU will prepare the Annual Assessment with required information and submit it to DWR.

The timeline may be modified to reflect updated information available from surrounding agencies. For example, the Metropolitan Water District of Southern California (MWD) will be preparing its own Annual Assessment each year. The draft WSCP published by MWD describes a process of preparing the Annual Assessment for approval by the MWD Board of Directors in June of each year. This information may help inform the Annual Assessment prepared by WMWD, and RPU may wish to coordinate its analysis with that of WMWD. RPU staff would seek to make RPU's Annual Assessment reflective of the most current information available from its supply partners.

2.2 Data and Methodologies

This section describes the data and methodologies that will be used by RPU to evaluate water system reliability for the coming year, while considering that the year to follow could be dry.

2.2.1 Evaluation Criteria

RPU will rely on locally applicable criteria for each Annual Assessment. These criteria will include the Annual Report of the Western-San Bernardino Watermaster, which describes groundwater conditions in the San Bernardino Basin Area, the Riverside Basin, and the Colton Basin.

2.2.2 Water Supply

RPU's anticipated supplies will be quantified for the near-term, and descriptive text will be used to note any anticipated reductions in supply.

2.2.3 Unconstrained Customer Demand

RPU will prepare an estimate of unconstrained demand (as the term is used in Water Code Section 10632(a)(2)(B)(i)). The estimated demand will be calculated using the demand projection approach described in the UWMP, in combination with updated data for connections, climate, changes in land use, and recent water usage history.

2.2.4 Planned Water Use for Current Year Considering Dry Subsequent Year

RPU will describe the anticipated use of water supplies for the coming year, with the anticipation that the following year will be dry. The supplies will be characterized in a manner consistent with the UWMP, in combination with updated data for climate and recent observations.

2.2.5 Infrastructure Considerations

RPU will describe any potential infrastructure constraints on the ability to deliver adequate supplies to meet expected customer demands in the coming year. RPU will show that its system of wells, pipelines, pump stations, and storage tanks have adequate capacity to deliver the anticipated demands. RPU will describe any anticipated capital projects that are intended to address constraints in production, treatment, or distribution.

2.2.6 Other Factors

RPU will describe any specific locally applicable factors that could influence or disrupt supplies. RPU will also describe unique local considerations that are considered as part of the annual assessment.

3.0 Six Standard Water Shortage Stages

Since the preparation of the 2015 UWMP, the Water Code has been amended to define six standard shortage levels. The six standard water shortage levels correspond to progressively increasing estimated shortage conditions (up to 10-, 20-, 30-, 40-, 50- percent, and greater than 50-percent shortage compared to the normal reliability condition). If an agency elects to retain an existing set of shortage levels from its previous WSCP, then the document must provide a crosswalk to relate the existing stages to the six standard stages.

RPU's agreements with its wholesale customers (WMWD and Norco) call for deliveries to be suspended during periods when surplus water is not available. RPU's plan addresses the stages and actions it will take as a retail supplier.

RPU's updated plan has five shortage stages. The Water Conservation Stage shall be set by City Council action. All normal water efficiency programs and water conservation regulations shall remain in force during any stage, unless the City Council directs otherwise.

3.1 Wholesale Shortage Levels

RPU's wholesale customers receive only surplus water by agreement. Therefore, wholesale deliveries will cease if RPU lacks surplus water and enters a water shortage condition.

3.2 Retail Shortage Levels

RPU's updated WSCP includes five stages. Stage One represents normal conditions. Stage One conservation measures are voluntary, and will be encouraged and promoted through public outreach, education, and awareness measures by the City.

Stages Two, Three, Four, and Five represent potential and actual shortages. Stages Two, Three, Four, and Five may be triggered by a local or regional water supply shortage; production, treatment, transmission, or delivery infrastructure problems; limited or unavailable alternative water supplies; or other circumstances. Stages Two, Three, Four, and Five conservation measures are mandatory, and violations may be subject to criminal, civil, and/or administrative action. Stage One conservation measures become mandatory when Stage Two, Three, Four, or Five are declared.

Stage Five Water Shortage Emergency may be an immediate emergency, or a threatened future water shortage, or both.

Upon declaration of a Water Shortage Emergency:

1) No new construction meters will be issued.
2) No construction water may be used for earth work such as road construction purposes, dust control, compaction, or trench jetting.
3) No new building permits shall be issued, except:
   a) Projects found by the City Council to be necessary for public health and safety.
   b) Projects using recycled water for construction.
   c) Projects which will not result in a net increase in non-recycled water use.
   d) Projects with adequate conservation offsets, if available. The City, in its sole discretion, may choose to make conservation offsets available. Conservation offset costs shall be based on the cost of conserving the water elsewhere to provide the water needed for a project, the cost of providing an alternative water supply deemed acceptable by the City, or other measures as may be found in the City's Water Use Efficiency Master Plan. Conservation Offset fees will be set forth in the Water Rules and Rate Schedules.

During a mandated reduction, RPU will intensify its water conservation programs, especially public education. RPU promotes efficient water use including non-potable uses such as landscaping and irrigation (Chapter 19.67 of the Riverside Municipal Code).

As part of this update, RPU added a fifth stage for shortages of greater than 50 percent. RPU has elected to use these five stages and provide a crosswalk to relate RPU's stages to the six standard stages. This crosswalk is shown in Table 1.

Table 1. Crosswalk from RPU Shortage Levels to Six Standard Shortage Levels

RPU Shortage Level	Supply Condition/Shortage	Percent Shortage Range		DWR Standard Level	Shortage Range
1	Normal Water Supply	0%		1	<= 10%
2	Minimum Water Shortage	15%		2	10 – 20%
3	Moderate Water Shortage	15 – 20%			
4	Severe Water Shortage	20 – 50%		3	20 – 30%
				4	30 – 40%
				5	40 – 50%
5	Water Shortage Emergency	> 50%		6	> 50%

RPU's retail shortage levels are identified in Table 2.

Table 2. Retail Water Shortage Contingency Plan Levels (DWR Table 8-1R)

Submittal Table 8-1 Water Shortage Contingency Plan Levels		
Shortage Level	Percent Shortage Range	Water Shortage Condition
1	0%	Stage One (Normal Water Supply) applies when the City can meet all of its water demands, but declares, by resolution, that it has determined that certain conservation methods are warranted to preserve existing water supplies in the event the City will be unable to meet future water demands with its local water supplies. Any other normal water efficiency programs and water conservation regulations remain in force during Stage One.
2	< 15%	Stage Two (Minimum Water Shortage) applies when the City Council declares, by resolution, a reasonable probability exists that the City will not be able to meet all of its water demands with its local water supplies, other regional or statewide conditions warrant implementation; or RPU faces an actual supply shortage of up to 15%, corresponding to CA Water Code section 10632 shortage levels 1 and 2.
3	15 – 20%	Stage Three (Moderate Water Shortage) applies when the City Council declares, by resolution, a reasonable probability exists that the City will not be able to meet all of its water demands with its local water supplies, other regional or statewide conditions warrant implementation; or RPU faces an actual supply shortage of 15-20%, corresponding to CA Water Code section 10632 shortage levels 2 and 3.
4	20 – 50%	Stage Four (Severe Water Shortage) applies when the City Council declares, by resolution, that the City's ability to meet its water demands with its local water supplies is seriously impaired; or RPU faces an actual supply shortage of 20-50%, corresponding to CA Water Code section 10632 shortage levels 3, 4, and 5.
5	>50%	Stage Five Water Shortage Emergency applies when the City Council declares, by resolution, that the City's ability to meet its water demands with its local water supplies is so seriously impaired that RPU faces an actual supply shortage of over 50%, corresponding to CA Water Code section 10632 shortage level 6.

The WSCP limits water demand during times of shortage in five stages. These stages can be triggered when there is water deficiency caused by limitations on supply or by limitations on RPU's delivery system. The plan shall be implemented in case of a long or short-term water deficiency, or in case of an emergency water shortage.

Higher stages will be implemented as shortages continue and/or if customer response does not bring about adequate desired water savings to address the shortage.

Each level represents an anticipated reduction in the supplies that would normally be available to the agency. These supply reductions could be the result of a variety of potential causes including natural forces, system component failure or interruption, regulatory actions, contamination, or any combination thereof.

The stages involve voluntary and mandatory conservation measures and restrictions, depending on the causes, severity, and anticipated duration of the water supply shortage. The locally appropriate shortage response actions that would be taken at each level to address the resulting gap between supplies and demands are described in the following section.

4.0 Shortage Response Actions

This section describes the shortage response actions that would be taken by RPU at each shortage level. These actions have been grouped into categories including:

- Supply Augmentation Actions
- Demand Reduction Actions and Mandatory Use Restrictions
- Operational Changes

4.1 Supply Augmentation

For long-range planning, RPU continues to evaluate opportunities for transfers, exchanges, and purchase of imported water to increase supply reliability. These programs are described in the supply sections of the UWMP. RPU has agreements in place to access imported supply if needed, and RPU has an emergency interconnection with Norco that could provide supply in an emergency. RPU is also able to receive 30 cubic feet per second (cfs) through a connection with Western.

RPU has a number of interties that can be used to provide additional supply during an emergency. Some of these are currently configured to deliver water from RPU to another system; however, during an emergency, they could be used as part of a regional water distribution strategy. The interties are shown in Table 3. Emergency Interties.

Table 3. Emergency Interties

Water Agency	Connection	Location	Capacity (GPM)	Emergency/ Imported	Direction	RPU Pressure zone
Western Municipal Water District	Mills Connection	Cannon Road	13,400	Imported	To RPU	1600 Zone
Western Municipal Water District	Van Buren Highline	Mocking Bird Canyon Road	13,400	Imported / Wholesale	To/ From RPU	1200 Zone
City of Corona	Distribution System	Sampson Avenue	1,500	Emergency	To/ From RPU	925 Zone
City of San Bernardino	Distribution System	North of Sixth Street	2,000	Emergency	To/ From RPU	Raw
East Valley Water District	Distribution System	Sixth Street near Pedley	4,000	Emergency	From RPU	Raw
Western Municipal Water District	Lusk Highland (Box Springs)	Sycamore Canyon Boulevard	1,500	Emergency	To RPU	1600 Zone
Western Municipal Water District	Praed/Lake Knolls	Lake Knoll Park	1,500	Emergency	To RPU	1400 Zone
Western Municipal Water District	Green Orchard	Near Whitegate No. 2 Reservoir	1,100	Emergency	To RPU	1700 Zone
Norco	Norco Intertie	Arlington Ave	800	Emergency Wholesale	To/ From RPU	1100 Zone

RPU has not identified specific supply augmentation actions that would be taken to address a short-term water shortage, beyond its long-range planning and future supply projects described in the UWMP. The standard categories of supply augmentation actions are shown in Table 4.

Table 4. Supply Augmentation Actions (DWR Table 8-3)

Table 8-3: Supply Augmentation and Other Actions			
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier	How much is this going to reduce the shortage gap?	Additional Explanation or Reference
All	Exchanges	Medium	Agreement with Norco
All	Stored emergency supply	Medium	ERP in place since Sep-2020
All	Other actions (describe)	Medium	Enhanced recharge

4.2 Demand Reduction Actions and Mandatory Use Restrictions

RPU offers various rebates to encourage water use efficiency (such as ultra-low flush toilets, high-efficiency washing machines, etc.). RPU has a water rate structure that promotes water efficiency. The reduction goal is to balance supply and demand.

The demand reduction actions that will be implemented at each shortage level are shown in Table 5. The format of Table 5 is based on the standard submittal table defined by DWR. The column titled, “Penalty, Charge, or Enforcement” is a Yes/No field to characterize whether there is a penalty, charge, or enforcement action associated with implementing the demand reduction action. This field is a required field in the standard submittal table defined by DWR.

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

Submittal Table 8-2: Demand Reduction Actions				
Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
All	Expand Public Information Campaign	N/A		
All	Provide Rebates on Plumbing Fixtures and Devices	N/A		
All	Provide Rebates for Landscape Irrigation Efficiency	N/A		
All	Other	N/A	Water Efficiency Pricing	
1	Other	N/A	Voluntary Conservation	
2, 3, 4	Other	Medium	Mandatory Conservation	
All	Prohibited water waste	N/A	The application of potable water to outdoor landscapes in a manner that causes runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures	Yes
All	Prohibited water waste	N/A	The use of a hose that dispenses potable water to wash a motor vehicle, except where the hose is fitted with a shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use	Yes
All	Prohibited water waste	N/A	The application of potable water to driveways and sidewalks	Yes
All	Prohibited water waste	N/A	The use of potable water in a fountain or other decorative water feature, except where the water is part of a recirculating system	Yes
All	Prohibited water waste	N/A	The application of potable water to outdoor landscapes during and within 48 hours after measurable rainfall	Yes
All	Prohibited water waste	N/A	The serving of drinking water other than upon request in eating or drinking establishments, including but not limited to restaurants, hotels, cafes, cafeterias, bars, or other public places where food or drink are served and/or purchased	Yes
All	Prohibited water waste	N/A	The irrigation with potable water of ornamental turf on public street medians	Yes

Submittal Table 8-2: Demand Reduction Actions				
Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
All	Prohibited water waste	N/A	The irrigation with potable water of landscapes outside of newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission and the Department of Housing and Community Development.	Yes
All	Prohibited water waste	N/A	To promote water conservation, operators of hotels and motels shall provide guests with the option of choosing not to have towels and linens laundered daily. The hotel or motel shall prominently display notice of this option in each guestroom using clear and easily understood language.	Yes
1	Landscape - Limit landscape irrigation to specific times	Medium	Non-agricultural irrigation should be done from 6:00 p.m. to 10:00 a.m.	No
1	Other	Medium	Use of graywater, as that term is defined in the California Health and Safety Code, and recycled water for irrigation is permitted on any day and at any time, subject only to any permits issued by the City.	No
2	Other	Medium	Except as otherwise provided in this Section, all Stage One measures remain in effect.	Yes
2	Other	Medium	Customers will be asked to reduce their monthly water consumption up to 15-percent.	Yes
2	Landscape - Limit landscape irrigation to specific days	Medium	Non-agricultural irrigation is limited as follows: a. Properties may be irrigated only between the hours of 6:00 p.m. to 10:00 a.m. Irrigation of landscaping is prohibited on any day of the week from 10:00 a.m. to 6:00 p.m. b. Properties may not be irrigated more than three times per week. c. All automatic irrigation timers shall be adjusted according to irrigation time restrictions and changing weather patterns, and shall completely eliminate run-off. d. Use of graywater, as that term is defined in the California Health and Safety Code, and recycled water for irrigation is permitted on any day and at any time, subject only to any permits issued by the City.	Yes

Submittal Table 8-2: Demand Reduction Actions				
Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
2	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Medium	All plumbing leaks, improperly adjusted sprinklers, or other water appurtenances requiring repair or adjustment shall be corrected to the satisfaction of the City within 72 hours of notification by the City. The City will attempt to contact customers by phone, mail, email, or text, or printed "door-hanger" notice. All customers shall ensure that the City has current telephone contact information.	Yes
2	Other	Medium	Construction operations receiving water from a construction meter or water truck shall not use water unnecessarily for any purpose, other than those required by regulatory agencies. Construction projects requiring watering for new landscaping materials shall adhere to the designated non-agricultural irrigation requirements set forth above.	Yes
3	Other	Medium	Except as otherwise provided in this Section, all Stage One and Two measures remain in effect.	Yes
3	Other	High	Water customers will be asked to reduce their monthly water consumption by 15 to 20-percent for the duration of Stage Three.	Yes
3	Landscape - Limit landscape irrigation to specific days	Medium	Non-agricultural irrigation is limited as follows: (a) Properties may be irrigated only between the hours of 6:00 p.m. to 10:00 a.m. (b) Properties may not be irrigated more than three (3) times per week during the months of April through October and no more than two (2) times per week during the months of November through March. (c) All automatic irrigation timers shall be adjusted according to changing weather patterns and to completely eliminate run-off. (d) Use of graywater, as that term is defined in the California Health & Safety Code, or recycled water for irrigation is permitted on any day and at any time, subject only to any permits issued by the City.	Yes
4	Other	Medium	Except as otherwise provided in this Section, all Stage One, Two, and Three conservation measures shall be in full force and remain in effect during Stage Four.	Yes
4	Other	High	Water customers will reduce their monthly water consumption by 20 to 50 percent for the duration of Water Conservation Stage Four.	Yes

Submittal Table 8-2: Demand Reduction Actions				
Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
4	Landscape - Limit landscape irrigation to specific days	Medium	Non-agricultural irrigation shall be limited to supporting minimal survival of trees and shrubs. Trees and shrubs may be irrigated, only during the following designated hours and designated days: (a) Properties with odd number street addresses, parks, and public right of ways may irrigate only on Saturdays between the hours of 8:00 p.m. and 8:00 a.m. (b) Properties with even number street addresses may irrigate only on Sundays between the hours of 8:00 p.m. and 8:00 a.m. (c) Irrigation is prohibited on Mondays, Tuesdays, Wednesdays, Thursdays, and Fridays and on any day of the week from 8:00 a.m. to 8:00 p.m. (d) Use of graywater, as that term is defined in the California Health & Safety Code, or recycled water for irrigation is permitted on any day and at any time, subject only to any permits issued by the City.	Yes
4	Other	Medium	All outdoor watering and irrigation of lawns and similar ground covers is prohibited with the exception of plant materials determined by the General Manager to be rare, exceptionally valuable, or essential to the well-being of the public or threatened or endangered animals.	Yes
4	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	Medium	Washing of automobiles, trucks, trailers, boats, airplanes and other types of mobile equipment is prohibited except at a commercial car wash. Commercial car washes shall only use wholly- or partially-recycled water for washing automobiles, trucks, trailers, boats, airplanes and other types of mobile equipment. Washings necessary for the health, safety, and welfare of the public, such as garbage trucks or vehicles used for food and perishables, are exempt from this section.	Yes
4	Other water feature or swimming pool restriction	Low	Filling, refilling, or replenishing swimming pools, spas, ponds, streams, and artificial lakes is prohibited.	Yes
4	Water Features - Restrict water use for decorative water features, such as fountains	Low	Operation of any ornamental fountain, pond, or similar structure is prohibited.	Yes

Submittal Table 8-2: Demand Reduction Actions

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
4	CII - Other CII restriction or prohibition	Medium	Water used for commercial, manufacturing, or processing purposes shall be reduced as determined by the City Council.	Yes
5	Other	High	Water customers will reduce their monthly water consumption by more than 50 percent for the duration of Water Conservation Stage Five.	Yes
5	Other	Medium	No new construction meters will be issued.	Yes
5	Other	Medium	No construction water may be used for earth work such as road construction purposes, dust control, compaction, or trench jetting.	Yes
5	Other	Medium	No new building permit(s) shall be issued, except: a. Projects found by the City Council to be necessary for public health, safety. b. Projects using recycled water for construction. c. Projects which will not result in a net increase in non-recycled water use. d. Projects with adequate conservation offsets, if available. The City, in its sole discretion, may choose to make conservation offsets available. Conservation offset costs shall be based on the cost of conserving the water elsewhere to provide the water needed for a project, the cost of providing an alternative water supply deemed acceptable by the City, or other measures as may be found in the City's water use efficiency master plan. Conservation offset fees will be set forth in the Water Rules and Rate Schedules.	Yes

4.3 Operational Changes

RPU has identified operational changes that could be made to help address a short-term gap between demands and available supplies. These include:

- Increased monitoring and analysis of customer water usage
- Reductions in flushing of hydrants and dead-end lines
- Expediting planned system improvement projects that include reduction in water loss (e.g., replacement of water mains that are experiencing higher rates of leaks and breaks)
- Activate conservation protocols
- Stop or minimize watering of medians and park areas with potable water
- Stopping production of wholesale water for Norco and Western

4.4 Additional Mandatory Restrictions

RPU has identified a series of restrictions that will be implemented at different shortage levels. These prohibitions are identified in RMC Code Chapter 14.22 and are included in the demand reduction actions in Table 5.

4.5 Emergency Response Plan

The Water Code requires that an agency's WSCP address and plan for catastrophic water shortages. This information can be found in the agency's Emergency Response Plan (ERP). Each agency's ERP can contain sensitive information related to potential vulnerabilities or impacts of natural disasters or malevolent acts. Therefore, these documents are not typically made publicly available.

Major hazards that can degrade the quality and/or impact the quantity of water available to the RPU water system include: regional power outages, earthquakes, liquefaction (i.e. high groundwater levels), floods, chemical spills, groundwater contamination, and terrorist acts. Some of these hazards could also adversely impact the distribution systems, such as the major transmission mains or reservoirs. Interruptions to water supplies from any of the above-mentioned hazards may be limited to days or even months, except for groundwater contamination, which could last several years.

RPU has implemented several measures to improve the reliability of its water system. Actions taken to prepare for a catastrophe include:

- Establishing criteria for a proclamation of water shortage
- Developing alternate sources of water supplies
- Establishing contacts and mutual aid agreement with other agencies
- Establishing an Emergency Response Team/Coordinator
- Preparing an Emergency Response Plan (ERP) (updated in September 2020)
- Conducting mock exercises and drills to evaluate and improve response procedures
- Developing public awareness programs

RPU's ERP may be activated whenever any of the following conditions exist:

- Natural disasters such as earthquake, flood, etc.
- Major loss of power
- Loss of water transmission lines, main breaks, or other major facilities
- Water quality issues involving a "boil water" order or other major public relations/communication issues
- Emergency curtailment
- Disturbance affecting nearby utilities
- Hazardous spills
- Terrorist activities

The ERP will guide damage assessment, record keeping, prioritization of repairs, and coordination with other City Departments. The goal is returning to normal operations as soon as practicable.

Typically, RPU's actions during voluntary rationing include a public information campaign and media outreach to encourage conservation. Typical emergency response actions to the above listed possible catastrophes may include the following:

- Assemble crisis management teams at pre-designated locations and Emergency Operations Center (EOC)
- Assess and document damaged facilities and repair or reactivate as appropriate
- Assess for signs of contamination, i.e., increase the frequency of monitoring
- Deactivate contaminated sources
- Install additional treatment facilities
- Community outreach e.g., public education, media outreach, boil water advisories
- Coordination with other City Departments, and other government agencies
- Seek mutual aid assistance
- Drain contaminated reservoirs as quickly as possible

Inter-ties between water systems can be used to deliver water from other water retailers to assist RPU during short-term emergencies. RPU is also a member of the Water Agency Response Network (WARN). RPU also participates in the Emergency Response Network of the Inland Empire (ERNIE). ERNIE is a water/wastewater mutual aid network within San Bernardino and Riverside counties. ERNIE meets monthly and provides regular training for utilities in emergency response and long-term emergency planning.

An assessment of each listed catastrophe and summarized description of previous responses and/or actions undertaken to prepare for such catastrophic events is described below.

4.5.1 Regional Power Outage

RPU is a municipally owned utility that provides both water and electricity within the City of Riverside. RPU maintains a diverse power supply portfolio that includes long term base load and local generating facilities (LGF) and an increasing amount of renewable resources. With significant internal generation capability, RPU can maintain a high level of reliability in emergency situations.

Riverside's system may be vulnerable to natural gas disruption. If natural gas interruption were to occur when RPU's system demand reaches its peak, RPU may experience heightened stress to maintain service reliability to RPU customers.

Some wells in the Bunker Hill Basin are powered by electricity provided by Southern California Edison. During electrical power outages, RPU will still be able to produce some potable water from the Gage wells and the Garner B well because they are or can be powered by gas engines. The water distribution system is entirely within the RPU electric service territory. Most of the pressure zones within the distribution system are fed by gravity from reservoirs. RPU is likely to have water in storage to meet an average day demand should a power outage occur.

4.5.2 Earthquakes

The City of Riverside is located close to two major earthquake faults: the San Andreas and San Joaquin. Earthquakes pose potential significant risks to the RPU water system and could potentially result in water supply shortages and disruptions to the transmission/ distribution systems.

Groundwater produced from wells in the Bunker Hill Basin is conveyed using two major transmission mains that cross several earthquake faults before reaching the Linden Evans Reservoir in Riverside.

The City of Riverside has experienced some earthquakes in the past without significant water supply shortages or disruptions. Stronger earthquakes can result in major water service disruptions either due to facility damage or to power outages. In some cases, harmful microorganisms could migrate into the distribution system because of pipe breaks and/ or damage to water disinfection facilities. It could take several days (or more) to restore the water distribution system depending on the severity of damage.

An earthquake in northern or central California could disrupt deliveries from the State Water Project to WMWD. The California Department of Water Resources (DWR) has estimated that in the event of a major earthquake in or near the Delta, regular water supply deliveries from the SWP could be interrupted for up to three years, posing a substantial risk to the California business economy. Current planning efforts for these potential events are described in documents prepared by DWR, MWD, and WMWD.

4.5.3 Liquefaction

Another potential hazard related to earthquakes is soil liquefaction. Liquefaction is a phenomenon that occurs in loose, saturated, granular soils when subjected to strong ground movement. High groundwater levels shallower than the threshold (between 30 and 50 feet below ground surface) may at some locations increase the potential for liquefaction during very strong earthquakes. Some of the wells in the North Orange area of the Riverside Basin are located in areas prone to liquefaction.

RPU also has wells located in the lower part of the Bunker Hill Basin (i.e. the pressure zone), which can be vulnerable to liquefaction. Some segments of RPU's major water transmission mains from the Bunker Hill Basin to the Linden Evans Reservoir are located within potential liquefaction zones.

RPU cooperated with the San Bernardino Basin Area Basin Technical Advisory Committee (BTAC) to develop and implement a "high groundwater" mitigation plan to reduce the potential for liquefaction in the Bunker Hill Basin. During the recent past, the Western San-Bernardino Watermaster has not declared a "high groundwater" risk. Groundwater levels are lower in the Bunker Hill Basin due to climactic conditions and increased pumping. Should high groundwater pose a threat in the future, RPU will assist by pumping additional groundwater from the pressure zone, in accordance with the rules and regulations of the Western-San Bernardino Watermaster.

4.5.4 Floods

Some RPU wells are located within the flood plain of the Santa Ana River and vulnerable to flooding. In 1995, floods washed away the superstructure of the Gage 21 well, and the sub-surface portion of the well was subsequently abandoned. The Gage 98-1 well replaced the Gage 21 well with funding assistance from the Federal Emergency Management Agency (FEMA). The other wells most vulnerable to flooding include some Warren Tract wells. RPU replaced some of the Warren Tract wells upstream with the Cooley J well.

In 1999, the Seven Oaks Dam, which is located near the headwaters of the Santa Ana River, became operational and reduces the magnitude, frequency and vulnerability of flooding while increasing available water rights.

RPU has implemented many measures in order to minimize adverse impacts of flooding on groundwater contamination. For example, RPU increased the length of well seals for newer wells to greater depths than required by the State of California water well standards. RPU also screens newer wells generally deeper than 200 feet below ground surface. Additional chlorination stations were added further upstream of the major transmission mains thereby increasing the disinfection contact time. Prior to 2003, wells in the North Orange area pumped directly into the distribution system. The North Orange wells have now been connected by a major transmission main to the Linden Evans Reservoir for increased disinfection contact time.

Potential hazards from floods are not limited to physical damage and/ or loss of water infrastructure. Studies have found that more than half of the waterborne disease outbreaks in the United States in the past 50 years were preceded by heavy rainfall. Outbreaks due to surface water contamination, which accounted for approximately 24-percent of all outbreaks, were associated with extreme precipitation occurring during the month of the outbreak and one month prior. Outbreaks due to groundwater contamination, which accounted for approximately 36-percent of all outbreaks, were associated with extreme precipitation occurring within a three-month lag preceding the outbreaks.

4.5.5 Groundwater Contamination

Potential hazards that could result in groundwater contamination include migrating contaminant plumes, chemical spills, agricultural return flows, leaky underground storage tanks, and septic systems. Chemical spills and leaking underground storage tanks initially tend to affect a small number of wells, whereas contaminant plumes, agricultural return flows, and septic systems may impact regional aquifers.

Previous improper waste disposal practices have created several groundwater contamination plumes that impact a number of RPU wells. Groundwater contamination can potentially interrupt water supplies for an extended period. However, some groundwater contamination/ chemical spills have Potentially Responsible Parties (PRP) who can be made to pay mitigation costs. PRPs are mitigating groundwater contamination due to organic solvents thus assuring continued availability and reliability of water supplies affected by those plumes.

In 2001, RPU reached an agreement with manufacturers of the pesticide dibromochloropropane (DBCP) that has contaminated wells in the Riverside Basin. Under the agreement, DBCP manufacturers agreed to pay the capital costs and 40 years of operating and maintenance costs of facilities to remove DBCP from production wells. RPU has been reimbursed for Granular Activated Carbon (GAC) treatment plants that enable RPU to produce additional water from wells previously abandoned due to contamination.

In the late 1980s and early 1990s, water produced from wells connected to the Waterman Transmission main were used to blend impaired water produced from the Gage wells to meet potable drinking water standards. However, water quality within the Gage wells has improved since the Responsible Parties constructed wellhead treatment facilities and replaced shallow wells with deeper ones. The treatment facilities are capable of removing a range of contaminants.

4.6 Seismic Risk Assessment and Mitigation Plan

Water Code Section 10632.5 requires agencies to assess seismic risk to water supplies as part of their WSCP. The code also requires a mitigation plan for managing seismic risks.

In lieu of conducting their own seismic risk assessment, suppliers can comply with the Water Code requirement by submitting the relevant local hazard mitigation plan or multi-hazard mitigation plan.

RPU participated in the development of the Riverside County Local Hazard Mitigation Plan, which was updated in 2018. The Riverside County LHMP is available on the Riverside County web site at https://rivcoemd.org/LHMP.

The Riverside County LHMP includes an assessment of the region's vulnerability to a broad range of hazards, including earthquakes. It also describes mitigation strategies and actions to reduce the impacts of a seismic event.

RPU continues to include seismic risk assessment in its planning process for system improvements. Some elements of RPU's approach to mitigation seismic risk are:

- Several of RPU's reservoirs are outfitted with seismically actuated valves.
- Several of RPU's staging construction yards in the San Bernardino area have pipe storage readily available for emergency repairs and/or replacements.
- RPU restrains the joints of its distribution pipelines and utilizes welded steel pipes for its transmission mains.
- RPU is in the process of performing condition assessments and evaluating its reservoirs for seismic vulnerability.
- RPU uses flexible seismic joints on its pipelines where they transition from underground into highway bridge structures.
- RPU recently replaced Evans Reservoir to meet current seismic codes.
- RPU recently replaced the roof on Linden Reservoir to meet current seismic codes.

4.7 Shortage Response Action Effectiveness

RPU has estimated the effectiveness of shortage response actions in terms of reducing the gap between expected supplies and demands. These estimates were developed using industry resources and

observations from recent operating history at the agency. These estimates have been included in Table 5.

5.0 Communication Protocols

Timely and effective communication is a key element of WSCP implementation. RPU will need to inform customers, the general public, and other government entities of WSCP actions taken during a water shortage (either one derived from the Annual Assessment, or an emergency or catastrophic event).

The communication protocols to be used by RPU at each shortage level are summarized in Table 6.

Table 6. Communication Protocols

Stage 1 Normal Water Supply	Stage 2 Minimum Water Shortage	Stage 3 Moderate Water Shortage	Stage 4 Severe Water Shortage	Stage 5 Catastrophic Water Shortage
0% Demand Reduction	**15% Demand Reduction**	**15-20% Demand Reduction**	**20-50% Demand Reduction**	**>50% Demand Reduction**
Standard outreach efforts in effect	Update outreach to reflect conditions and Water Conservation Ordinance Stage 2 actions	Update outreach to generate immediate reductions in water demand and implementation of Water Conservation Ordinance Stage 3 actions	Update campaign and messages to raise awareness for more severe water-saving actions and implementation of Water Conservation Ordinance Stage 4 actions	Update campaign and messages to reflect extreme or emergency condition and implementation of Water Conservation Ordinance Stage 5 actions
Social media presence, updated website, etc.	Announce status change through social media, news release, and other standard communication outlets to stakeholders and general public	Announce status change through social media, news release, and other standard communication outlets to stakeholders and general public	Announce status change through social media, news release, and other communication outlets to stakeholders and general public	Announce status change through social media, news release, and other communication outlets to stakeholders and general public
Promote Water Use Efficiency (WUE) programs to achieve long-term water management goals	Increase WUE and conservation messaging	Supplement Stage 2 activities with additional outreach (mass media ads, partnerships, etc.)	Supplement Stage 3 outreach with additional outreach as needed (supplemental ads, etc.)	Supplement Stage 4 outreach with additional outreach as needed (hotline, reverse 911, etc.)
Encourage WUE and water conservation best practices	Increase promotion of ongoing WUE programs and resources	Continue promotion of ongoing WUE programs and resources	Conduct targeted outreach to reduce outdoor water use	Provide tools and resources to address imminent needs
	Coordinate with regional water agencies	Provide briefings to elected officials and other key leaders	Continue promotion of ongoing WUE programs and resources and provide specialized outreach to impacted industries	Continue enhanced coordination with regional agencies as needed
	Initiate regular Board reports on water use data and outreach efforts	Enhance and increase coordination with regional agencies as needed	Continue enhanced coordination with regional agencies as needed	Coordinate with emergency response services with daily advisories or alerts as needed

6.0 Compliance and Enforcement

The Water Conservation Ordinance states that any violation shall be subject to enforcement by issuance of an administrative citation pursuant to Chapter 1.17 of the Riverside Municipal Code. Prior to issuance of an administrative citation, the City shall give one courtesy notice requesting voluntary correction of the violation. The City Manager, or his or her designee, may enter into a written agreement with a customer to resolve any violation provided that such agreement is consistent with the purpose and intent of the Water Conservation Ordinance.

RPU has mechanisms in-place for monitoring compliance with actual mandated reductions. Water sales to customers are metered and billed monthly. RPU implements a meter maintenance program to assure accuracy. Collected revenues from water sales are incorporated into the monthly financial reports produced by the RPU Finance Section. RPU's billing system can be used to provide customers with reports of their water usage for current year and previous years. The billing software can also be used to evaluate compliance with mandated reductions.

RPU has the capability to determine reductions in water production. RPU maintains a comprehensive Supervisory Control and Data Acquisition (SCADA) system to monitor and control the water distribution system. All production wells are metered and monitored. The SCADA system is capable of recording potable water production and water levels within potable water reservoirs. Water levels of selected wells are regularly monitored and charted. Flow meters installed at pump stations and booster stations can be read automatically through the SCADA system to determine usage.

Water Rule No. 15 includes penalties for excessive water usage. According to Water Rule No. 15,

> "Whenever it appears to the Director that water delivered by the Water Utility is being used in violation of the terms of this Rule, he [/she] shall give written notice to the person so wasting water of his [/her] intention, after a reasonable time to be therein stated, to shut-off the water supply to the Person's Premises".

6.1 Appeals and Exemption Process

The City has processes in place for appeals and exemptions from penalties for violations. These are identified in the RMC, Chapter 1.17.

7.0 Legal Authorities

This section describes the legal authorities that the agency relies upon to implement the shortage response actions and the associated enforcement actions.

The current version of the Water Conservation Ordinance, which is Chapter 14.22 of the RMC, is attached to this document.

In accordance with Water Code Chapter 3 (commencing with Section 350) of Division 1 general provisions regarding water shortage emergencies, RPU shall declare a water shortage emergency in the event of a catastrophic interruption in supply.

RPU shall coordinate with any city or county within which it provides water supply services for the possible proclamation of a local emergency under California Government Code, California Emergency Services Act (Article 2, Section 8558). Including a list of and contacts for all cities or counties for which the Supplier provides service in the WSCP, along with developed coordination protocols, can facilitate compliance with this section of the Water Code in the event of a local emergency as defined in subpart (c) of Government Code Section 8558.

The cities and counties in the RPU's service area are shown in Table 7.

Table 7. City and County Coordination on Proclamation of Emergencies

City or County	Contact

Riverside County	County Emergency Management Department
City of Riverside	Office of Emergency Management / City Manager
City of Norco	City Manager / Public Works Director
Western Municipal Water District	Deputy Director of Water Resources

8.0 Financial Consequences of WSCP

This section describes the anticipated financial consequences to RPU of implementing the WSCP. The description includes potential reductions in revenue due to lower water sales and increased expenses associated with implementing the shortage response actions.

Potential financial impacts could include

- Reduced revenue from reduced water use
- Increased staff costs for tracking, reporting, patrolling, and enforcing restrictions
- Economic impacts associated with water-dependent businesses in the service area

Potential mitigation measures may include

- triggering of drought rate structures or surcharges
- using financial reserves
- reducing operation and maintenance expenses
- deferring capital improvement projects
- reducing future projected operation and maintenance expenses
- increasing fixed readiness-to-serve charge
- increasing commodity charge and water adjustment rates to cover revenue shortfalls
- other financial management mechanisms

RPU is fortunate as a water provider in California in that it owns, operates and maintains its own water supply and is not typically dependent on imported water from outside sources. RPU has responded to past droughts by continuing to offer a wide variety of water use efficiency and conservation programs for its customers in an effort to conserve its water resources. In addition, RPU has increased its drought messaging to its customers, increased community educational awareness and leveraged funding from MWD to provide incentives for water conservation programs such as turf removal.

RPU's long range water supply planning includes significant contributions of both conservation and recycled water. The behavioral changes instituted through conservation and water use efficiency should have some permanent impact. Changes in landscape patterns and uses will have permanent and on-going impacts to water use. Continuing conservation measures could negatively impact RPU's revenues and will be addressed as needed during analysis of cost of service.

RPU's typical water rate includes the following components: a fixed monthly charge, a prorated commodity charge based on consumption with increasing marginal rates and adjustments for seasonality, an energy factor adjustment, a surcharge for customers not within City Limits, and a Water Conservation and Reclamation surcharge. Revenue from fees such as fixed monthly charges, development related fees, and the backflow protection program will not be impacted by reduction in water usage due to droughts.

RPU has many options to cushion reduction in revenues due to reduced demand by its retail customers. RPU maintains reserves that can offset minor revenue impacts. In addition to these liquid assets, RPU has an additional 12 to 18 months of operating revenue in the form of non-liquid assets such as land and buildings. Other potential measures that RPU can implement to mitigate some revenue impacts due to shortages include adjusting the water rates, using water that has been stored in reservoirs, and refinancing existing bonds or issuing new bonds.

RPU seeks to maintain flexibility to adjust expenditures during drought conditions as well. Some expense categories such as purchased energy, treatment costs, and operations and maintenance will be reduced as revenue from water sales decrease. Reduced groundwater production will also lead to reduced energy costs. RPU can reduce or avoid some water treatment costs by choosing to operate wells that require the least amount of treatment. RPU can also pump the most efficient wells to further reduce energy costs. RPU can investigate additional energy savings from switching to cheaper rate schedules based on time of use by taking advantage of distribution system reservoir storage. Lastly, RPU can delay capital expenditures.

9.0 Monitoring and Reporting

This section describes how the agency will monitor and report on implementation of the WSCP. RPU has the capability to determine reductions in water production and consumption. RPU maintains a comprehensive SCADA system of the water distribution system. All production wells are metered and monitored. The SCADA system is capable of recording potable water production and water levels within potable water reservoirs. Water levels of selected wells are regularly monitored and charted. Flow meters installed at pump stations and booster stations can be read automatically through the SCADA system to determine usage. RPU can also use billing data to monitor changes in consumption.

RPU will gather data on key water use metrics and use the data to evaluate the effectiveness of response actions in achieving their intended water use reduction purposes. RPU will also gather data on customer compliance to evaluate the effectiveness of enforcement actions.

RPU will monitor water use by customers using its billing systems and operational control systems to monitor production and consumption. RPU measures and determines the actual water savings made by implementing each stage of the WSCP by relying on water meters that record the production and consumption of water. Each level of the WSCP has an associated target reduction for metered water use.

10.0 WSCP Refinement Procedures

RPU will monitor the implementation of this plan to evaluate its effectiveness as an adaptive management tool. The monitoring and reporting program described in Section 9 will provide information on the effectiveness of the shortage response actions during any shortage levels that may be invoked. If RPU determines that the shortage response actions are not effective in producing the desired results, it will initiate a process to refine the WSCP.

RPU will consider the addition of new shortage response actions or changes to the levels when shortage response actions are implemented. Suggestions for refinements will be collected from agency staff, customers, industry experts, and the general public. RPU will work with wholesale customers to share data and suggestions for refinement to identify opportunities to increase the effectiveness of the WSCP while maintaining alignment with other agencies in the region when possible.

RPU will review the WSCP's description of procedures for the Annual Assessment each year while preparing the Annual Assessment and adjust as needed.

11.0 Special Water Feature Distinction

RPU has distinguished swimming pools and spas as recreational water features, while non-pool and non-spa water features are considered decorative water features. This distinction is used in the shortage response actions because decorative water features have the potential to use recycled water, while pools and spas (recreational water features) must use potable water for health and safety considerations.

RMC Chapter 14.22.010(D) notes that

> A splash pad shall be defined as a recreational feature and includes any pavement or sidewalk area that is part of the splash pad. Operation of a splash pad is not prohibited by this ordinance as an unreasonable use of water.

12.0 Plan Adoption, Submittal, and Availability

RPU adopted this WSCP with the 2020 UWMP. The UWMP and WSCP were made available for public review during May of 2021. A public hearing was held on June 14, 2021 to allow public input on the draft UWMP and the WSCP.

The RPU board of directors adopted the UWMP and the WSCP at a meeting on June 14, 2021, and the City Council adopted them on June 22, 2021. The resolution of adoption is included as an attachment.

This WSCP was submitted to DWR through the WUEData portal before the deadline of July 1, 2021.

This WSCP will be available to the public on the agency's web site. Notice will be provided to cities and counties in the service area that the WSCP is available on the agency's web site.

If RPU identifies the need to amend this WSCP, it will follow the same procedures for notification to cities, counties and the public as used for the UWMP and for initial adoption of the WSCP. The draft amended WSCP will be made available for public review, and the agency's governing board will hold a public hearing to receive comments on the draft amended WSCP. Once RPU's governing board adopts the amended WSCP, the amended plan will be submitted to DWR and the California State Library, and it will be made available to the public and the cities and counties in the service area through placement on the agency's web site.

Appendix A. Riverside Municipal Code Chapter 14.22

(*pending approval by the City Council, currently scheduled for May 25, 2021 and June 1, 2021, and effective 30 days after)*

14.22.010 - Unreasonable uses of water.

A. No person shall use or permit the use of water for residential, commercial, industrial, agricultural, or any other purpose, contrary to any provision of this ordinance.

B. No person shall waste water or use it unreasonably. To prevent the waste and unreasonable use of water and to promote water conservation, each of the following actions is prohibited as an unreasonable use of water, except where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a state or federal agency:

1. The application of potable water to outdoor landscapes in a manner that causes runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures;

2. The use of a hose that dispenses potable water to wash a motor vehicle, except where the hose is fitted with a shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use;

3. The application of potable water to driveways and sidewalks;

4. The use of potable water in a fountain or other decorative water feature, except where the water is part of a recirculating system;

5. The application of potable water to outdoor landscapes during and within 48 hours after measurable rainfall;

6. The serving of drinking water other than upon request in eating or drinking establishments, including but not limited to restaurants, hotels, cafes, cafeterias, bars, or other public places where food or drink are served and/or purchased;

7. The irrigation with potable water of ornamental turf on public street medians; and;

8. The irrigation with potable water of landscapes outside of newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission and the Department of Housing and Community Development.

C. To promote water conservation, operators of hotels and motels shall provide guests with the option of choosing not to have towels and linens laundered daily. The hotel or motel shall prominently display notice of this option in each guestroom using clear and easily understood language.

D. A splash pad shall be defined as a recreational feature and includes any pavement or sidewalk area that is part of the splash pad. Operation of a splash pad is not prohibited by this ordinance as an unreasonable use of water.

(Ord. 7334 § 1, 2016; Ord. 7136 § 4, 2011)

14.22.020 - Water Conservation Program.

A. This chapter establishes a Water Conservation Program which uses five stages to address conditions and needs. The Water Conservation Stage shall be set by City Council action. All normal water efficiency programs and water conservation regulations shall remain in force during any stage, unless the City Council directs otherwise.

B. Stage One represents normal conditions; Stages Two, Three, Four, and Five represent potential and actual shortages. Stages Two, Three and Four may be triggered by a local or regional water supply shortage; production, treatment, transmission, or delivery infrastructure problems; limited or unavailable alternative water supplies~~;~~ or other circumstances.

C. Stage one conservation measures are voluntary, and will be encouraged through public outreach, education, and awareness measures by the City.

D. Stages Two, Three, Four, and Five conservation measures are mandatory, and violations may be subject to criminal, civil, and administrative enforcement.

(Ord. 7334 § 1, 2016; Ord. 7288 § 1, 2015; Ord. 7254 § 1, 2014; Ord. 7136 § 4, 2011)

14.22.030 - Stage One - Normal water supply.

A. Stage One applies when the City can meet all of its water demands, but declares, by resolution, that it has determined that certain conservation methods are warranted to preserve existing water supply in the event that the City will be unable to meet future water demands with its local water supplies.

B. Upon declaration of Stage One by the City Council, the following water conservation measures shall apply:

1. Non-agricultural irrigation should be done from 6:00 p.m. to 10:00 a.m. Irrigation water cannot leave the landscaped area.

2. Use of graywater, as that term is defined in the California Health and Safety Code, and recycled water for irrigation is permitted on any day and at any time, subject only to any permits issued by the City.

(Ord. 7334 § 1, 2016; Ord. 7288 § 1, 2015; Ord. 7254 § 1, 2014; Ord. 7136 § 4, 2011)

14.22.040 - Stage Two - Minimum water shortage.

A. Stage Two applies when the City Council declares, by resolution, a reasonable probability exists that the City will not be able to meet all of its water demands with its local water supplies, other regional or statewide conditions warrant implementation, or the State of California orders implementation; or RPU faces an actual supply shortage of up to 15%, corresponding to California Water Code Section 10632 shortage levels 1 and 2.

B. Upon declaration of Stage Two by the City Council, and the following measures shall apply:

1. Except as otherwise provided in this section, all Stage One measures remain in effect but shall be mandatory, not voluntary.

2. Customers will be asked to reduce their monthly water consumption up to 15 percent.

3. Non-agricultural irrigation is limited as follows:

a. Properties may be irrigated only between the hours of 6:00 p.m. to 10:00 a.m. Irrigation of landscaping is prohibited on any day of the week from 10:00 a.m. to 6:00 p.m.

b. Properties may not be irrigated more than three times per week.

c. All automatic irrigation timers shall be adjusted according to irrigation time restrictions and changing weather patterns, and shall completely eliminate run-off.

d. Use of graywater, as that term is defined in the California Health and Safety Code, and recycled water for irrigation is permitted on any day and at any time, subject only to any permits issued by the City.

4. All plumbing leaks, improperly adjusted sprinklers, or other water appurtenances requiring repair or adjustment shall be corrected to the satisfaction of the City within 72 hours of notification by the City. The City will attempt to contact customers by phone, mail, email or text, or printed "door-hanger" notice. All customers shall ensure that the City has current telephone contact information.

5. Construction operations receiving water from a construction meter or water truck shall not use water unnecessarily for any purpose, other than those required by regulatory agencies. Construction projects requiring watering for new landscaping materials shall adhere to the designated non-agricultural irrigation requirements set forth above.

(Ord. 7334 § 1, 2016; Ord. 7288 § 1, 2015; Ord. 7254 § 1, 2014; Ord. 7136 § 4, 2011)

14.22.050 - Stage Three - Moderate water shortage.

A. Stage Three applies when the City Council declares, by resolution, a reasonable probability exists that the City will not be able to meet all of its water demands with its local water supplies, other regional or statewide conditions warrant implementation, or the State of California orders implementation; or RPU faces an actual supply shortage of 15-20%, corresponding to California Water Code Section 10632 shortage levels 2 and 3.

B. Upon declaration of Stage Three by the City Council, the following measures shall apply:

1. Except as otherwise provided in this section, all Stage One and Two measures remain in effect, and Stage One measures shall be mandatory, not voluntary.

2. Water customers will be asked to reduce their monthly water consumption by 15 to 20 percent for the duration of Stage Three.

3. Non-agricultural irrigation is limited as follows:

a. Properties may be irrigated only between the hours of 6:00 p.m. to 10:00 a.m.

b. Properties may not be irrigated more than three times per week during the months of April through October and no more than two times per week during the months of November through March.

c. All automatic irrigation timers shall be adjusted according to changing weather patterns and to completely eliminate run-off.

d. Use of graywater, as that term is defined in the California Health and Safety Code, or recycled water for irrigation is permitted on any day and at any time, subject only to any permits issued by the City.

(Ord. 7334 § 1, 2016; Ord. 7288 § 1, 2015; Ord. 7254 § 1, 2014; Ord. 7136 § 4, 2011)

14.22.060 - Stage Four - Severe water shortage.

A. Stage Four applies when the City Council declares, by resolution, that the City's ability to meet its water demands with its local water supplies is seriously impaired; or RPU faces an actual supply shortage of 20-50% corresponding to California Water Code Section 10632 shortage levels 3, 4, and 5.

B. Upon declaration of Stage Four by the City Council, the following water conservation measures shall apply:

1. Except as otherwise provided in this section, all Stage One, Two, and Three conservation measures shall be in full force and effect during Stage Four, and Stage One measures shall be mandatory, not voluntary.
2. Water customers will reduce their monthly water consumption by 20 to 50 percent for the duration of Water Conservation Stage Four.
3. Non-agricultural irrigation shall be limited to supporting minimal survival of trees and shrubs. Trees and shrubs may be irrigated, only during the following designated hours and designated days:
    a. Properties with odd number street addresses, parks, and public right-of-ways may irrigate only on Saturdays between the hours of 8:00 p.m. and 8:00 a.m.
    b. Properties with even number street addresses may irrigate only on Sundays between the hours of 8:00 p.m. and 8:00 a.m.
    c. Irrigation is prohibited on Mondays, Tuesdays, Wednesdays, Thursdays, and Fridays and on any day of the week from 8:00 a.m. to 8:00 p.m.
    d. Use of graywater, as that term is identified in the California Health and Safety Code, or recycled water for irrigation is permitted on any day and at any time, subject only to any permits issued by the City.
4. All outdoor watering and irrigation of lawns and similar ground covers is prohibited with the exception of plant materials determined by the City Manager to be rare, exceptionally valuable, or essential to the well-being of the public or threatened or endangered animals.
5. Washing of automobiles, trucks, trailers, boats, airplanes and other types of mobile equipment is prohibited except at a commercial car wash. Commercial car washes shall only use wholly- or partially-recycled water for washing automobiles, trucks, trailers, boats, airplanes and other types of mobile equipment. Washings necessary for the health, safety, and welfare of the public, such as garbage trucks or vehicles used for food and perishables, are exempt from this section.
6. Filling, refilling, or replenishing swimming pools, spas, ponds, streams, and artificial lakes is prohibited.
7. Operation of any ornamental fountain, pond, or similar structure is prohibited.
8. Water used for commercial, manufacturing, or processing purposes shall be reduced as determined by the City Council.

(Ord. 7334 § 1, 2016; Ord. 7136 § 4, 2011)

14.22.070 – Stage Five - Water shortage emergency.

A. Stage Five applies when the City Council declares, by resolution, that the City's ability to meet its water demands with its local water supplies is so seriously impaired that RPU faces an actual supply shortage of over 50%, corresponding to California Water Code Section 10632 shortage level 6; and"

B. Upon declaration of a Water Shortage Emergency:
    1. No new construction meters will be issued.
    2. No construction water may be used for earth work such as road construction purposes, dust control, compaction, or trench jetting.
    3. No new building permit(s) shall be issued, except:
        a. Projects found by the City Council to be necessary for public health, safety.
        b. Projects using recycled water for construction.

c. Projects which will not result in a net increase in non-recycled water use.

d. Projects with adequate conservation offsets, if available. The City, in its sole discretion, may choose to make conservation offsets available. Conservation offset costs shall be based on the cost of conserving the water elsewhere to provide the water needed for a project, the cost of providing an alternative water supply deemed acceptable by the City, or other measures as may be found in the City's water use efficiency master plan. Conservation offset fees will be set forth in the Water Rules and Rate Schedules.

(Ord. 7334 § 1, 2016; Ord. 7136 § 4, 2011)

14.22.080 - Enforcement and severability.

A. Any violation of this article may be subject to enforcement by issuance of an administrative citation pursuant to Chapter 1.17 of this Code. Prior to issuance of an administrative citation, the City shall give one courtesy notice requesting voluntary correction of the violation. The City Manager, or his or her designee, may enter into a written agreement with a customer to resolve any violation provided that such agreement is consistent with the purpose and intent of this chapter.

B. If any phrase, section, sentence, or word of this ordinance is held invalid by a court of competent jurisdiction, such invalidity shall not affect any other phrase, section, sentence, or word of the ordinance that can be given effect without the invalid phrase, section, sentence, or word, and to this end each phrase, section, sentence, or word of this ordinance is declared to be severable.

(Ord. 7334 § 1, 2016; Ord. 7136 § 4, 2011)

Appendix B. Resolution of Adoption for WSCP