CITY OF GILROY

2020
WATER SHORTAGE CONTINGENCY PLAN

Draft

August 2021

AKEL
ENGINEERING GROUP, INC.

AKEL
ENGINEERING GROUP, INC.

Smart Planning Our Water Resources

July 1, 2021

City of Gilroy
7351 Rosanna Street
Gilroy California, 95020

Attention: Gary Heap, P.E., City Engineer

Subject: **Water Shortage Contingency Plan**

Dear Gary:

We are pleased to submit the City of Gilroy 2020 Water Shortage Contingency Plan (2020 WSCP) which is intended to address the Urban Water Management Planning Act (UWMPA) of 1983 and amendments thereof.

The City's Water Shortage Contingency Plan (WSCP) was originally included in the 2015 UWMP, which received letters of review and completeness from the Department of Water Resources. As part of amendments to the UWMPA the WSCP is now required to be prepared and adopted separately from the UWMP. The 2020 WSCP builds upon previous water shortage contingency planning efforts completed by the City and reflects updates to the City's water shortage levels and water conservation measures for consistency with state-wide requirements provided by the Department of Water Resources.

We extend our thanks to you; Daryl Jordan, Public Works Director; Jeff Castro, Operation Services Supervisor-Water Division; Jorge Duran, Senior Engineer; Faranak Mahdavi, Senior Engineer Capital Improvement Projects; and other City staff whose courtesy and cooperation were valuable in reviewing and completing this study.

Sincerely,

AKEL ENGINEERING GROUP, INC.

Tony Akel, P.E.
Principal

Enclosure: 2020 Water Shortage Contingency Plan

7433 NORTH FIRST STREET, SUITE 103 • FRESNO, CALIFORNIA 93720 • (559) 436-0600 • FAX (559) 436-0622
www.akeleng.com

Acknowledgements

City Council

Marie Blankley, Mayor

Fred Tovar, Mayor Pro Tempore

Rebeca Armendariz

Dion Brocco

Zach Hilton

Peter Leroe-Munoz

Carol Marques

Management Personnel

Gary Heap, City Engineer

Daryl Jordan, Public Works Director

Jeff Castro, Operation Services Supervisor-Water Division

Jorge Duran, Senior Engineer

Faranak Mahdavi, Senior Engineer Capital Improvement Projects

City of Gilroy
2020 Water Shortage Contingency Plan

Table of Contents

Page No.

City of Gilroy
2020 Water Shortage Contingency Plan

Figures

Tables

Section 1 INTRODUCTION

This report documents the City of Gilroy's Water Shortage Contingency Plan (WSCP). This 2020 WSCP document builds upon previous water shortage contingency planning efforts completed by the City and documented in the 2010 and 2015 Urban Water Management Plans (UWMP). This WSCP reflects updates to the City's water shortage levels and water conservation measures for consistency with state-wide requirements provided by the Department of Water Resources. As part of the 2020 UWMP update, the Department of Water Resources requires urban water suppliers to prepare a stand-alone 2020 WSCP, which is separated from the 2020 UWMP, and intended to manage a water shortage. As the City continues to monitor the effectiveness of the WSCP, this document can be updated and adopted separately from the UWMP.

Though it is a stand-alone document, the 2020 WSCP is still considered one of the elements of the 2020 UWMP, as required by the State Law.

Based on Department of Water Resources (DWR) requirements, and consistent with previous planning efforts, this WSCP includes the following sections:

- Water Supply Reliability Analysis
- Annual Water Supply and Demand Assessment
- Shortage Response Actions
- Communication Protocols
- Compliance and Enforcement
- Legal Authorities
- Financial Consequences of WSCP Activation
- Monitoring and Reporting
- Special Water Feature Distinction
- Plan Adoption, Submittal, and Availability

Section 2 WATER SUPPLY RELIABILITY ANALYSIS

Law

10632 (a)(1)	*The analysis of water supply reliability conducted pursuant to Section 10635.*

The City currently uses groundwater as the sole source of water supply, with wells extracting water from the Llagas Subbasin. This groundwater basin is managed by Valley Water, and the Valley Water 2016 GMP lists the rates of natural recharge for these groundwater supply sources. Consistent with previously planning efforts, the City's Water Supply Reliability Analysis considers the available supply volume for each Subbasin as equal to the rate of natural recharge. The Water

Supply Reliability Analysis also considers the effects on available supply during a single-dry and five-year dry period; for conservative planning purposes, supply reduction percentages from the Valley Water 2020 UWMP were used to estimate the available groundwater supply during these dry year periods.

As part of the 2020 UWMP, the City has also prepared a Drought Risk Assessment (DRA), which is a proactive planning review that readies the City for worst-case water supply conditions should they occur in the immediate future. The DRA compares the City's projected demands over the next five years to estimated available supplies should a five-year dry period occur. The results of the DRA prepared as part of the 2020 UWMP indicate that the City has sufficient supplies to meet projected demands over the next five years.

Section 3 ANNUAL WATER SUPPLY AND DEMAND ASSESSMENT PROCEDURES

Law

10632 (a)(2)	*The procedures used in conducting an annual water supply and demand assessment that include, at a minimum, both of the following:* *(A) The written decision-making process that an urban water supplier will use each year to determine its water supply reliability.* *(B) The key data inputs and assessment methodology used to evaluate the urban water supplier's water supply reliability for the current year and one dry year, including all of the following:* *(i) Current year unconstrained demand, considering weather, growth, and other influencing factors, such as policies to manage current supplies to meet demand objectives in future years, as applicable.* *(ii) Current year available supply, considering hydrological and regulatory conditions in the current year and one dry year. The annual supply and demand assessment may consider more than one dry year solely at the discretion of the urban water supplier.* *(iii) Existing infrastructure capabilities and plausible constraints.* *(iv) A defined set of locally applicable evaluation criteria that are consistently relied upon for each annual water supply and demand assessment.* *(v) A description and quantification of each source of water supply.*
10632.1	*An urban water supplier shall conduct an annual water supply and demand assessment pursuant to subdivision (a) of Section 10632 and, on or before July 1 of each year, submit an annual water shortage assessment report to the department with information for anticipated shortage, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the supplier's water shortage contingency plan. An urban water supplier that relies on imported water from the State Water Project or the Bureau of Reclamation shall submit its annual water supply and demand assessment within 14 days of receiving its final allocations, or by July 1 of each year, whichever is later.*

Updates to the California Water Code now require that urban water suppliers prepare a water supply and demand assessment on an annual basis (Annual Assessment). The findings of this Annual Assessment will be summarized in a report submitted to the DWR by July 1 of each calendar year, with the first report required for submission on July 1st, 2022. The purpose of this

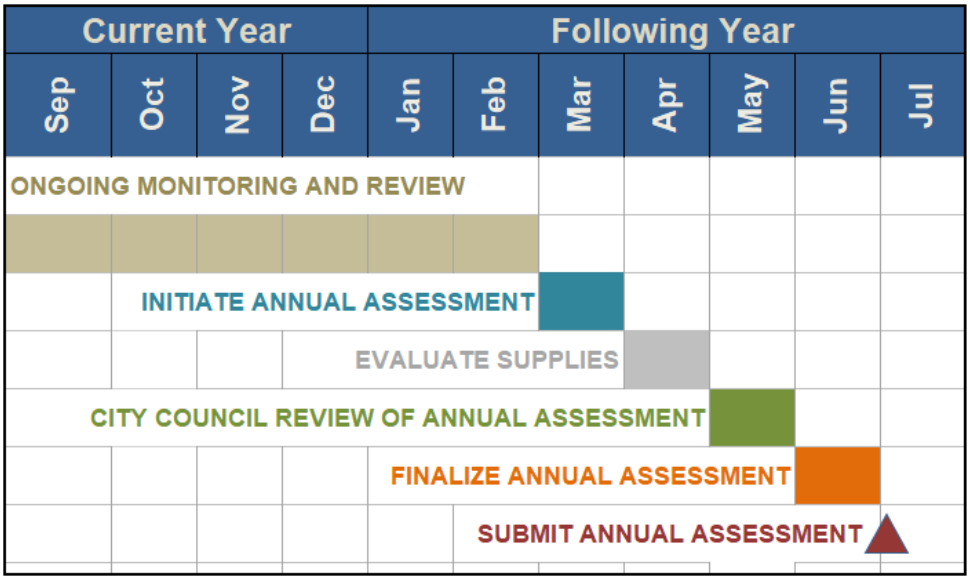
annual assessment is to ensure water suppliers are proactively considering the available water supplies and service area demand requirements, as well as identifying the potential need for implementing the Water Shortage Contingency Plan.

It should be noted that DWR is in the process of preparing a stand-alone guidance document that will outline general procedures to aid urban water suppliers in preparing the Annual Assessment. The decision-making process and Annual Assessment completion steps are preliminary at this point and will be further refined as the guidance document by DWR is completed.

3.1 Decision Making Process

This section describes the decision-making process to prepare and approve the Annual Assessment each year. It should be noted that the Annual Assessment and decision-making process will rely on the findings of the Valley Water Annual Assessment, which will include documentation of available water supply information and any County-wide required water shortage actions to be implemented.

Figure 3-1 Annual Assessment Reporting Timeline



September to February – Ongoing Monitoring and Review

For the majority of the year, City staff will continue to monitor and report monthly water consumption and production. This information will be used when the Annual Assessment is initiated to prepare a year-to-year comparison of system-wide water demands for the purpose of projecting demands for the following year.

March – Initiate WSCP Annual Assessment

City staff will initiate the Annual Assessment process by gathering the collected demand and production data. Other relevant information includes but is not limited to the following:

- Land Use/Planning: Changes in land use or number of building permits will be used in estimating the next year's demands.
- Hydrologic Year Review: The City's wet year typically ends in April and rainfall information over the past year can be gathered and reviewed.
- Climate Forecast: Any available climate projection information.

The purpose of gathering this information will be to compare the various factors that affect water demand throughout the City's service area. This comparison will guide the City's projection for water demand in the upcoming year.

April – Review Available Supply Information

According to the Valley Water 2020 UWMP, a preliminary Annual Assessment will be completed by the month of April. City staff will review this document once available and use it as a basis for estimating the available supply in the upcoming year. If required, City staff will also prepare to initiate any water shortage response actions noted by Valley Water.

May – City Council Review of Annual Assessment

The draft of Annual Assessment will be presented to City Council for their information and discussion. If water shortage actions are recommended by the Annual Assessment, the City Council will be asked to begin the implementation of the recommended actions.

June – Finalize Annual Assessment

The Annual Assessment is finalized based on any feedback received during the City Council review process.

July – Submit Annual Assessment

The Annual Assessment will be submitted to DWR on or before July 1st.

3.2 Data and Methodologies

This section describes the key data and methodologies used in the preparation of the Annual Assessment. This section also includes historical water supply information, historical and projected water demand, demand and projected water supply demand, which the city uses to evaluate their water supply reliability for a normal and a dry subsequent year.

3.2.1 Evaluation Criteria

The primary criteria used in preparing the City's Annual Assessment are the projected water demand and available supply. The available supply information will be based on a County-wide review of available water supplies prepared by Valley Water. The demand projections will be prepared using a combination of factors, including a comparison to historical demand, land use changes, building permits, and historical rainfall. The City will continue to review its Annual Assessment preparation process and additional criteria may be added if considered appropriate.

3.2.2 Water Supply

The City currently relies on groundwater as the sole source of supply. There are more than 9 groundwater wells used by the City, each of which is monitored and has production reported on a monthly basis. These monthly production records will be used to characterize the City's current water production requirement and compared to previous years to estimate production requirements for the upcoming year.

As the Groundwater Sustainability Agency, Valley Water manages water supplies throughout Santa Clara County; this includes the Llagas Subbasin, which is used as the City's source of supply. The water supply analysis prepared by Valley Water in preparation of their Annual Assessment will provide a critical basis for water supply assumptions, regarding available water supply volumes and any pumping restrictions required to be implemented if any.

3.2.3 Current Year Unconstrained Customer Demand

Billed water consumption is reported on a monthly basis and will be used to characterize the current water consumption requirements for the City. The monthly records will be compared to corresponding months of the previous year to identify any significant changes in water use behavior throughout the City's service area. In addition to consumption records, known recent developments or current building permits will enable City staff to estimate changes to water demand in the upcoming year.

3.2.4 Current Year Available Supply

The Annual Assessment estimates the current year available supply for current hydrological conditions as well as a possible subsequent dry year. The supply estimate will be based on the Drought Risk Assessment supply estimation methodology documented in the 2020 UWMP and will also incorporate information from the Valley Water Annual Assessment.

3.2.5 Infrastructure Considerations

The annual assessment will include a review of any ongoing capital projects that are expected to affect the demands and supply projections. Examples of such capital projects include water loss reductions, distribution expansion to serve growth, or new groundwater wells. The City is also in

the process of updating the Water System Master Plan, which will identify any additional infrastructure considerations to be implemented within the City's service area.

Section 4 SIX STANDARD WATER SHORTAGE LEVELS

Law

> *10632 (a)(1) 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.*
>
> *10632 (a)(3)*
>
> *(A) Six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, and 50 percent shortages and greater than 50 percent shortage. Urban water suppliers shall define these shortage levels based on the suppliers' water supply conditions, including groundwater levels, changes in surface elevation or level of subsidence, or other changes in hydrological or other local conditions indicative of the water supply available for use. Shortage levels shall also apply to catastrophic interruption of water supplies, including but not limited to, a regional power outrage, an earthquake, and other potential emergency events.*
>
> *(B) An urban water supplier with an existing water shortage contingency plan that uses different water shortage levels may comply with the requirement in subparagraph (A) by developing and including a cross-reference relating its existing categories to the six standard water shortage*

The City recently adopted the DWR-recommended six standard water shortage levels, as documented in Table 4-1. Identifying the appropriate shortage level will be in accordance with the procedures outlined in *Section 3 – Annual Water Supply and Demand Assessment Procedures.* As an example, if the Annual Assessment determines a shortage of 22%, The City would be considered in a Severe Drought condition. With recommendations from City staff, the City Council has the authority to declare the appropriate conservation level considered necessary to manage the system demands and mitigate the water shortage. The City Council can also downgrade, upgrade, or terminate a shortage response level based on City staff recommendations.

Table 4-1 Water Shortage Levels

Shortage Level	Shortage Level Condition	Percent Shortage Range
0	Normal	*None*
Level 1	Alert	Up to **10%**
Level 2	Significant	11 to **20%**
Level 3	Severe	21 to **30%**
Level 4	Critical	31 to **40%**
Level 5	Crisis	41 to **50%**
Level 6	Emergency	**> 50%**

The City's groundwater supply is dependent on natural recharge from surface water runoff as well as additional recharge provided by Valley Water through raw water imports. In periods of drought, when less imported water is available to Valley Water for the purpose of recharging the groundwater basins they manage, Valley Water will call on water suppliers to reduce groundwater pumping to avoid basin overdraft and minimize subsidence. In order to reduce water consumption city-wide, the City has a water conservation ordinance that may be invoked to implement restrictions on water use.

Currently, the City's conservation ordinance describes permanent water use restrictions as well as a multiple-stage water rationing plan that can be invoked to adjust water use with shortage conditions. Each water rationing stage includes a water demand reduction percentage, which is to be applied to normal water demands. The plan is dependent on the cause, severity, and anticipated duration of the water shortage, and a combination of voluntary and mandatory water conservation measures, which can be put in place to reduce City-wide water usage. The water shortage stages are summarized on the following page in **Table 4-2**.

Section 5 SHORTAGE RESPONSE ACTIONS

Law

10632 (a)(4) Shortage response actions that align with the defined shortage levels and include, at a minimum, all of the following:

- *(A) Locally appropriate supply augmentation actions.*
- *(B) Locally appropriate demand reduction actions to adequately respond to shortages.*
- *(C) Locally appropriate operational changes*
- *(D) Additional, mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions and appropriate to the local conditions.*
- *(E) For each action, an estimate of the extent to which the gap between supplies and demand will be reduced by implementation of the action.*

Pursuant to the CWC 10632 (a) (4), this section documented the detailed shortage response actions which align with the shortage levels into different categories.

5.1 Demand Reduction

There are a number of demand reduction measures urban water suppliers can implement as response actions to corresponded water shortage levels. Some of these may include watering and outdoor water usage prohibitions, water rate structure changes, public educations or water supply service adjustments. Other demand reduction actions such as infrastructure improvements or replacing, water-efficient assets are considered as long-term water demand reductions will not be listed in this water shortage contingency plan.

Consumption reduction actions are methods taken by a water supplier to reduce demand within the service area, whereas prohibitions are specific limitations on water use; the City's consumption reduction actions are summarized in **Table 5-1.** The permanent water use restrictions enforced year-round are also documented in the table.

Table 4-2 Water Shortage Contingency Plan Levels

Shortage Level	Percent Supply Shortage/ Reduction	Gilroy Shortage Level	*Valley Water Shortage Level Title*	Water Supply Condition
Level 0	**None**	**Normal**	*Normal*	Permanent water conservation requirements are effective at all times
Level 1	**Up to 10%**	**Alert**	*Alert*	Water Supply Shortage exists when City Council determines and agrees that up to 10% consumer demand reduction is necessary to make more efficient use of water.
Level 2	**11 to 20%**	**Significant**	*Severe*	Water Supply Shortage exists when City Council determines and agrees that 11% - 20% consumer demand reduction is necessary to make more efficient use of water.
Level 3	**21 to 30%**	**Severe**	*Critical*	Water Supply Shortage exists when City Council determines and agrees that 21% - 30% consumer demand reduction is necessary to make more efficient use of water.
Level 4	**31 to 40%**	**Critical**	*Critical*	Water Supply Shortage exists when City Council determines and agrees that 31% - 40% consumer demand reduction is necessary to make more efficient use of water.
Level 5	**41 to 50%**	**Crisis**	*Emergency*	Water Supply Shortage exists when City Council determines and agrees that 41% - 50% consumer demand reduction is necessary to make more efficient use of water.
Level 6	**> 50%**	**Emergency**	*Emergency*	Water Supply Shortage is referred to as Water Shortage Emergency, and exists when City Council determines and agrees that a consumer demand reduction of greater than 50% is necessary to maintain public water supplies.

Table 5-1 Demand Reduction Actions

Level	Restrictions and Prohibitions on End Users Category	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
Level 0 *(Year-Round)*	CII - Lodging establishment must offer opt out of linen service	Encourage hotels, motels and other commercial lodging establishments to provide customers the option of not having towels and linen laundered daily. Commercial lodging establishments are encouraged to prominently display notice of this option in each bathroom using clear and easily understood language.	No
Level 0 *(Year-Round)*	CII - Restaurants may only serve water upon request	Encourage eating or drinking establishments, including but not limited to a restaurant, hotel, cafe, cafeteria, bar, or other public places where food or drinks are sold, served, or offered for sale to provide drinking water to any person only when expressly requested.	No
Level 0 *(Year-Round)*	CII - Commercial kitchens required to use pre-rinse spray valves	Encourage food preparation establishments, such as restaurants or cafes to use water conserving dish wash spray valves.	No
Level 0 *(Year-Round)*	Other	Discourage installation of single pass cooling systems in buildings requesting new water service.	No
Level 0 *(Year-Round)*	Other	Discourage installation of non-recirculating water systems in new commercial conveyor car wash and new commercial laundry systems.	No
Level 0 *(Year-Round)*	Other	Encourage all commercial conveyor car wash systems to install operational re-circulating water systems.	No
Level 0 *(Year-Round)*	Other	When directed by the Public Works Director, recycled water fill stations shall be made available for construction water for purposes, including	No

Table 5-1 Demand Reduction Actions

Level	Restrictions and Prohibitions on End Users Category	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
		dust control. Recycled water fill stations may be removed upon completion of construction activities in the area.	
Level 0 *(Year-Round)*	Pools and Spas - Require covers for pools and spas	Recommend that all existing pools use a pool cover or solar blanket to reduce water loss due to evaporation.	No
Level 1	Landscape - Limit landscape irrigation to specific days	Limit watering or irrigating of lawn, landscape or other vegetated area with potable water to three days per week from April through October. The watering days are designated depending upon house address (odd house and no house address – Monday, Wednesday, and Friday, even house address – Tuesday, Thursday, and Saturday). This provision does not apply to landscape irrigation zones that exclusively use very low flow drip type irrigation systems when no emitter produces more than two (2) gallons of water per hour. This provision also does not apply to watering or irrigating by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system.	Yes
Level 1	Landscape - Limit landscape irrigation to specific days	Limit watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to no more than one day per week during November through March (odd house and no house address – Monday, even house address – Tuesday). This provision does not apply to landscape irrigation zones that exclusively use very low flow drip type irrigation systems when no emitter produces more than two (2) gallons of water per hour. This provision also does not apply to watering or irrigating by use of a hand-held bucket or similar container, a hand-held	Yes

Table 5-1 Demand Reduction Actions

Level	Restrictions and Prohibitions on End Users Category	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
		hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system.	
Level 1	Pools and Spas - Require covers for pools and spas	Require all new pools to have a pool cover or solar blanket to reduce water loss through evaporation.	Yes
Level 1	Other - Prohibit use of potable water for washing hard surfaces	Prohibit washing down hard or paved surfaces, including but not limited to buildings, structures, sidewalks, walkways, driveways, parking areas, tennis courts, patios or alleys.	Yes
Level 1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Require leaks, breaks, or other malfunctions in the water user's plumbing or distribution system to be repaired within seventy-two (72) hours of notification by the city unless other arrangements are made with the city.	Yes

Table 5-1 Demand Reduction Actions

Level	Restrictions and Prohibitions on End Users Category	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
Level 1	Landscape - Restrict or prohibit runoff from landscape irrigation	Prohibit the application of water to outdoor landscapes in a manner that causes runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, driveway, street, alley, gutter, ditch, parking lots, or structures.	Yes
Level 1	Water Features - Restrict water use for decorative water features, such as fountains	Prohibit the operating a water fountain or other decorative water feature that does not use recirculated water	Yes
Level 1	Other	Prohibit using water to wash or clean a vehicle, including but not limited to any automobile, truck, van, bus, motorcycle, boat or trailer, whether motorized or not, except by use of a hand-held bucket or similar container or a hand-held hose equipped with a positive self-closing water shut-off nozzle or device. This subsection does not apply to any commercial car washing facility.	Yes
Level 1	CII - Restaurants may only serve water upon request	Prohibit eating or drinking establishments, including but not limited to a restaurant, hotel, cafe, cafeteria, bar, or other public places where food or drinks are sold, served, or offered for sale, from providing drinking water to any person unless expressly requested.	Yes
Level 1	CII - Lodging establishment must offer opt out of linen service	Require hotels, motels and other commercial lodging establishments to provide customers the option of not having towels and linen laundered daily. Commercial lodging establishments must prominently display notice of this option in each bathroom using clear and easily understood language.	Yes
Level 1	Other	Prohibit the installation of single pass cooling systems in buildings requesting new water service.	Yes

Table 5-1 Demand Reduction Actions

Level	Restrictions and Prohibitions on End Users Category	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
Level 1	Other	Prohibit the installation of non-re-circulating water systems in new commercial conveyor car wash and new commercial laundry systems.	Yes
Level 1	CII - Commercial kitchens required to use pre-rinse spray valves	Prohibit food preparation establishments, such as restaurants or cafes from using non-water conserving dish wash spray valves.	Yes
Level 1	Other	Require all commercial conveyor car wash systems to have installed operational re-circulating water systems, or must have secured a waiver of this requirement from the city.	Yes
Level 1	Other	When directed by the Public Works Director, recycled water fill stations shall be made available for construction water for purposes, including dust control. Recycled water fill stations may be removed upon completion of construction activities in the area.	Yes
Level 1	Other water feature or swimming pool restriction	Refilling of existing private pools is prohibited, except to maintain water levels, unless the pool is in eminent danger of failure.	Yes
Level 2	Landscape - Limit landscape irrigation to specific days	Limit watering or irrigating of lawn, landscape or other vegetated area with potable water to two days per week from April through October. The watering days are designated depending upon house address (odd house and no house address – Wednesday and Sunday, even house address – Tuesday and Saturday). This provision does not apply to landscape irrigation zones that exclusively use very low flow drip type irrigation systems when no emitter produces more than two (2) gallons of water per hour. This provision also does not apply to watering or irrigating by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device,	Yes

Table 5-1 Demand Reduction Actions

Level	Restrictions and Prohibitions on End Users Category	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
		or for very short periods of time for the express purpose of adjusting or repairing an irrigation system.	
Level 2	Landscape - Limit landscape irrigation to specific days	Limit watering or irrigating lawn, landscape or other vegetated area with potable water is limited to no more than one day per week during November through March (odd house and no house address – Monday, even house address – Tuesday). This provision does not apply to landscape irrigation zones that exclusively use very low flow drip type irrigation systems when no emitter produces more than two (2) gallons of water per hour. This provision also does not apply to watering or irrigating by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system.	Yes
Level 3	Water Features - Restrict water use for decorative water features, such as fountains	Prohibit filling or re-filling ornamental lakes or ponds with potable water, except to the extent needed to sustain aquatic life, provided that such animals are of significant value and have been actively managed within the water feature prior to declaration of a supply shortage level under this section.	Yes
Level 3	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Require all leaks, breaks, or other malfunctions in the water user's plumbing or distribution system to be repaired within forty-eight (48) hours of notification by the city unless other arrangements are made with the city	Yes
Level 3	Other	City Council may consider adopting rate structures and other pricing mechanisms to maximize water conservation.	Yes

Table 5-1 Demand Reduction Actions

Level	Restrictions and Prohibitions on End Users Category	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
Level 3	Landscape - Other landscape restriction or prohibition	Prohibit the applications of potable water to outdoor landscapes during and within 48 hours following measurable rainfall.	Yes
Level 4	Landscape - Other landscape restriction or prohibition	Prohibit the irrigation with potable water outside of newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission.	Yes
Level 4	Landscape - Other landscape restriction or prohibition	Prohibit the irrigation with potable water or ornamental turf on public street medians, including roundabouts.	Yes
Level 4	Landscape - Prohibit all landscape irrigation	Prohibit watering or irrigating of lawn, landscape or other vegetated area with potable water. This restriction does not apply to the following categories of use, unless the city has determined that recycled water is available and may be applied to the use: (a) Maintenance of vegetation, including trees and shrubs, that are watered using a hand-held bucket or similar container, hand-held hose equipped with a positive self–closing water shut-off nozzle or device; (b) Maintenance of existing landscape necessary for fire protection; (c) Maintenance of existing landscape for soil erosion control; (d) Maintenance of plant materials identified to be rare or essential to the well-being of protected species; (e) Maintenance of landscape within active public parks and playing fields, day care centers, golf course greens, and school grounds, provided that such irrigation does not exceed two (2) days per week for no more than fifteen (15) minutes watering per designated water day per station	Yes

Table 5-1 Demand Reduction Actions

Level	Restrictions and Prohibitions on End Users Category	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
		and is prohibited between the hours of 9:00 a.m. and 5:00 p.m. Pacific Standard/Daylight Savings Time. (f) Actively irrigated environmental mitigation projects.	
Level 4	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Require all leaks, breaks, or other malfunctions in the water user's plumbing or distribution system to be repaired within twenty-four (24) hours of notification by the city unless other arrangements are made with the city.	Yes
Level 5	Other	The city may limit the issuance of new potable water services, temporary meters and/or statements of immediate ability to serve or provide potable water service (such as, can and will-serve letters, certificates, or letters of availability), except under the following circumstances: (a) A valid, unexpired building permit has been issued for the project; or (b) The project is necessary to protect the public health, safety, and welfare; or (c) The applicant provides substantial evidence of an enforceable commitment that water demands for the project will be offset prior to the provision of a new water meter(s) to the satisfaction of the city. (d) This provision does not preclude the resetting or turn-on of meters to provide continuation of water service or the restoration of service that has been interrupted for a period of one year or less."	Yes
Level 6	Other	Upon declaration of a Level 6 Water Supply Shortage Emergency condition, the City Administrator is authorized to implement a program in his or her discretion to limit or withhold the issuance of building permits which require new or expanded water service, except to protect the	Yes

Table 5-1 Demand Reduction Actions

Level	Restrictions and Prohibitions on End Users Category	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
		public health, safety and welfare, or in cases which meet the city's adopted conservation offset requirements.	
Level 6	Other	Upon the declaration of a Level 6 Water Supply Shortage condition, the city may suspend consideration of annexations to its service area. This subsection does not apply to boundary corrections and annexations that will not result in any immediate increased use of water.	Yes

5.2 Supply Augmentation

As noted in previous sections, groundwater is the City's sole source of supply and there are no known opportunities for water supply augmentation through actions such as exchanges, transfers, or purchase programs. Therefore, supply augmentation actions are excluded from the City's Water Shortage Contingency Plan at this time.

5.3 Operation Changes

During a water shortage, changes to water system operations may be considered. These operational changes may include improving water usage consumption and tracking, changes to fire hydrant testing frequencies, alteration in maintenance cycles, and expedited water leak repairs.

5.4 Additional Mandatory Restrictions

Additional mandatory restrictions have been reported in a previous section.

5.5 Emergency Response Plan

During an imminent or emergency-related shortage, the City Manager will activate a water shortage response team. This team will include: public utilities, water, fire, planning, health, emergency services, and the Mayor's office. Other actions and procedures that are to follow a catastrophic event will be developed by this team.

5.6 Seismic Risk Assessment and Mitigation Plan

Law

10632.5 (a)	*In addition to the requirements of paragraph (3) of subdivision (a) of Section 10632, beginning January 1, 2020, the plan shall include a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities.*
(b)	*An urban water supplier shall update the seismic risk assessment and mitigation plan when updating its urban water management plan as required by Section 10621.*
(c)	*An urban water supplier may comply with this section by submitting, pursuant to Section 10644, a copy of the most recent adopted local hazard mitigation plan or multi-hazard mitigation plan under the federal Disaster Mitigation Act of 2000 (Public Law 106-390) if the local hazard mitigation plan or multi-hazard mitigation plan addresses seismic risk.*

In addition to the emergency response plan described in a previous section the California Water Code now requires urban water suppliers to document a locally appropriate multi-hazard mitigation plan, as developed under the federal Disaster Mitigation Act of 2000, that includes documentation of seismic risk assessment. Valley Water, previously Santa Clara Valley Water District, developed such a hazard mitigation plan in October 2017. The City's service area is included in the boundaries reviewed as part of this mitigation plan.

5.7 Shortage Response Action Effectiveness

In addition to documenting demand reduction actions the 2020 WSCP also estimates the effectiveness of these actions on reduce system-wide demand. The City records water consumption and production on a monthly basis and this data can be used to estimate the effect of any demand reduction actions implemented. Most recently, during the 2012-2016 drought, the City entered Water Shortage Level 2 for several summer months of 2015. This included the implementation of multiple demand reduction actions described in a previous section. Based on a comparison of historical monthly production data, it is estimated that the system-wide water use was 10%-20% lower for the duration of the Level 2 Water Shortage as compared to other years. As the City implements the WSCP, ongoing review of changes in monthly production will enable City staff to review the effectiveness of the demand reduction actions and prohibitions.

Section 6 COMMUNICATION PROTOCOLS

Law

10632 (a)(5)	*Communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments, regarding, at a minimum, and of the following:* *(A) Any current or predicted shortages as determined by the annual water supply and demand assessment described pursuant to Section 10632.1.* *(B) Any shortage response actions triggered or anticipated to be triggered by the annual water supply and demand assessment described pursuant to Section 10632.1.* *(C) Any other relevant communications.*

When the City identifies the need for short-term water use reductions as directed by the Water Shortage Contingency Plan or Annual Assessment, clear and effective communication will be critical to achieve the necessary demand reductions. Methods of public notification include newspaper publications, bill inserts, City website announcements, social media posts, and press releases or informational campaigns. These public notification methods would be implemented in the event of a Level 2 Water Shortage and would increase in frequency with increasing water shortage levels.

Section 7 COMPLIANCE AND ENFORCEMENT

Law

10632 (a) (6)	*For an urban retail water supplier, customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions as determined pursuant to Section 10632.2.*

Customers who violate the provisions noted in the water code for water shortage conditions shall receive the following:

- One written notice of the violation from Public Works Department personnel or police department.
- A second violation within any consecutive 12 month period is punishable by a fine not to exceed one hundred dollars.
- A third violation within any consecutive 12 month period is punishable by a fine not to exceed two hundred dollars.
- Any subsequent violation within any consecutive 12 month period is punishable by a fine not to exceed five hundred dollars.
- In addition to fines, the City, after written notice, may install a flow restrictor or discontinue service to consumers who violate provisions of this section.

Section 8 LEGAL AUTHORITIES

Law

10632 (a) (7) *(A) A description of the legal authorities that empower the urban water supplier to implement and enforce its shortage response actions specified in paragraph (4) that may include, but are not limited to, statutory authorities, ordinances, resolutions, and contract provisions.*
(B) A statement that an urban water supplier shall declare a water shortage emergency in accordance with Chapter 3 (commencing with Section 350) of Division 1. [see below]
(C) A statement that an urban water supplier shall coordinate with any city or county within which it provides water supply services for the possible proclamation of a local emergency, as defined in Section 8558 of the Government Code.

Water Code Section Division 1, Section 350

Declaration of water shortage emergency condition. The governing body of a distributor of a public water supply, whether publicly or privately owned and including a mutual water company, shall declare a water shortage emergency condition to prevail within the area served by such distributor whenever it finds and determines that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the distributor to the extent that there would be insufficient water for human consumption, sanitation, and fire protection.

This City has the legal authority to implement and enforce its water shortage response actions and relative penalties, water charge adjustments, and water service alteration or prohibition. City Ordinance 2015-04, which amended the water supply shortage regulations for the City in May 2015, documents the demand reduction measures as well as enforcement protocols.

Section 9 FINANCIAL CONSEQUENCES OF WSCP ACTIVATION

Law

10632 (a) (8)	*A description of the financial consequences of, and responses for, drought conditions, including, but not limited to, all of the following:* *(A) A description of potential revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).* *(B) A description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).* *(C) A description of the cost of compliance with Chapter 3.3 (commencing with Section 365) of Division 1. [retail urban suppliers only]*

For most water suppliers, operating costs are fixed rather than variable based on the quantity of water sold. As a result, when conservation programs are implemented, it often becomes necessary to increase water rates. This is based on lower income because of lower total consumption and fixed revenue requirements. To counteract this, reduction in the form of reducing peak demands can delay the need to develop new costly water sources.

The City's Water Fund (Fund 720) allows for a small emergency fund cash reserve. Capital improvement projects within Fund 720 may be deferred to help offset revenue problems if necessary.

The City also maintains Fund 436, which is the Water Development Fund, to help fund capital improvement projects related to new developments. In the event of an emergency, General Fund reserves may be used. However, a Water Shortage Emergency Fund may be considered by the City in order to mitigate potential impacts from a water shortage. In addition, this fund will help to stabilize water rates during times of shortage, and any water revenue surplus collected as a result of the shortage rate adjustments will be used to replenish the Water Shortage Emergency Fund. The City has implemented a water rate structure that has successfully reduced water demand.

The City's current water rate structure consists of a fixed monthly charge dependent on meter size, and a tiered volumetric rate based on water consumption and elevation zone. The first tier of the rate structure generally represents the average cost of water, and during a water shortage, residents should aim to be in the first tier. The second tier is for conservation rates and is set higher than the previous rate, thus providing incentive to the user to lower water usage.

The following measures, also shown on **Table 9-1**, may be implemented in the more restrictive water shortage levels to offset the reduced revenue.

- Increase the unit rate for all tiers by a fixed percentage.
- Increase the unit rate for all tiers except the lowest residential tier (Lifeline Tier) by a percentage, which might be the same for all tiers or larger increases for higher tiers.

- Impose a temporary drought surcharge on each account based on meter size.
- Impose excessive penalties for water use over a specific amount.
- Impose a peaking charge based on the highest billed monthly water use from the previous year.

If at any time, Valley Water institutes a tiered pump tax structure, City may increase in water rates, drought surcharges, and/or excess use penalties based on tiered Valley Water's rate structure.

An excess water use surcharge may be imposed in order to encourage compliance with the water shortage level 4 to level 6 conditions, if the customer water allotment is exceeded. The excess water surcharge applies only to the water bill and does not correspond to the water use prohibitions.

Table 9-1 Financial Consequences of WSCP

Stage	Supply Reduction	Potential Mitigation Actions
4-6	> 30%	Increase the unit rate for all tiers by a fixed percentage.
4-6	> 30%	Increase the unit rate for all tiers except the lowest residential tier (Lifeline Tier) by a percentage, which might be the same for all tiers or larger increases for higher tiers.
4-6	> 30%	Impose a temporary drought surcharge on each account based on meter size.
4-6	> 30%	Impose excessive penalties for water use over a specific amount.
4-6	> 30%	Impose a peaking charge based on the highest billed monthly water use from the previous year.

Section 10 MONITORING AND REPORTING

Law

10632 (a) (9)	*For an urban retail water supplier, monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements.*

Monitoring and reporting as part of the Water Shortage Contingency Plan and Annual Assessment will be based on the metered production and consumption data. Ongoing review of this information, and comparisons to historical data for similar months, will enable the City to monitor the effectiveness of the WSCP measures. Additionally, due to implemented shortage response actions and water shortage levels, the City's Water Department may increase the frequency of reading meters in order to collect, track, and analyze water use.

Section 11 WSCP REFINEMENT PROCEDURES

Law

10632 (a) (10)	*Reevaluation and improvement procedures for systematically monitoring and evaluating the functionality of the water shortage contingency plan in order to ensure shortage risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented as needed*

While the WSCP is a standalone document adopted separately from the 2020 UWMP it should be considered a dynamic planning tool and be subject to ongoing refinement efforts as necessary. Following the declaration of a water shortage and implementation of the WSCP, the monitoring and reporting steps described in a previous section will provide valuable insight into the effectiveness of the WSCP. City staff will evaluate the effectiveness of communication protocols, demand reduction actions, operational changes, or financial consequence mitigation. If this review reveals opportunities for procedural refinements or new WSCP actions, City staff may elect to incorporate these items into an amended version of the WSCP.

Section 12 SPECIAL WATER FEATURE DISTINCTION

Law

10632 (b)	*For purposes of developing the water shortage contingency plan pursuant to subdivision (a), an urban water supplier shall analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code.*

The California Water Code requires urban water suppliers to distinguish between water features that are artificially supplied with water as opposed to swimming pools and spas. The City's current demand reduction actions include this distinction, as documented in a previous section.

Section 13 PLAN ADOPTION, SUBMITTAL, AND AVAILABILITY

Law

10632 (c)	*The urban water supplier shall make available the water shortage contingency plan prepared pursuant to this article to its customers and any city or county within which it provides water supplies no later than 30 days after adoption of the water shortage contingency plan.*

The WSCP adoption and submittal process, as well as the public availability, are the same as those for the City's UWMP. However, the WSCP may be periodically amended independently from the City's UWMP. Should an amendment to the WSCP be implemented, stakeholder and public notification methods consistent with the UWMP will be performed prior to adoption of the amended plan.