Greenfield
California

2020

Water Shortage

Contingency Plan

HEART OF THE VALLEY
CITY OF GREENFIELD

August
2021

City of Greenfield

2020 Water Shortage Contingency Plan

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ACRONYMS AND ABBREVIATIONS

AF	Acre-Feet
BMP	Best Management Practice
CA	California
City	City of Greenfield
CWC	California Water Code
DRA	Drought Risk Assessment
DWR	Department of Water Resources
ERP	Emergency Response Plan
GMP	Groundwater Management Plan
GPCD	Gallons per Capita per Day
GPD	Gallons per Day
GPM	Gallons per Minute
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GW	Groundwater
MCL	Maximum Contaminant Level
UWMP	Urban Water Management Plan
VOC	Volatile Organic Compounds
Water Code	California Water Code
WSCP or WSC	Water Shortage Contingency Plan
WUE	Water Use Efficiency

Section 1 - Introduction:

This report documents the City of Greenfield's Water Shortage Contingency Plan (WSCP). This 2020 Water Shortage Contingency Plan (WSCP) document builds upon previous water shortage contingency planning efforts completed by the City and documented in the 2015 Urban Water Management Plan (UWMP). This WSCP reflects updates to the City's WSCP as adopted in 2018, for consistency with statewide requirements provided by the Department of Water Resources (DWR). As part of the 2020 UWMP update, the DWR requires urban water suppliers to prepare a stand-alone 2020 WSCP, that is separate from the 2020 UWMP, and is intended to assist in managing a potential water shortage. As the City continues to monitor the effectiveness of the WSCP, this document can be updated and adopted separately from the UWMP.

Although this 2020 WSCP is a stand-alone document, it is still considered one of the elements of the 2020 UWMP, as required by the State Law. Based on DWR requirements, and consistent with previous planning efforts, this WSCP includes the following sections:

1. Introduction
2. Water Supply Reliability Analysis
3. Annual Water Supply and Demand Assessment
4. Six Standard Water Shortages Stages
5. Shortage Response Actions
6. Communication Protocols
7. Compliance and Enforcement
8. Legal Authorities
9. Financial Consequences of WSCP Activation
10. Monitoring and Reporting
11. WSCP refinement procedures
12. Special Water Feature Distinction
13. Plan Adoption, Submittal, and Availability

Section 2 - Water Supply Reliability Analysis

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

"Section 10635

(a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

(b) Every urban water supplier shall include, as part of its urban water management plan, a drought risk assessment for its water service to its customers as part of information considered in developing the demand management measures and water supply projects and programs to be included in the urban water management plan. The urban water supplier may conduct an interim update or updates to this drought risk assessment within the five-year cycle of its urban water management plan update."

Pursuant to CWC Section 10632(a)(1), this section examines the (a) findings related to water system reliability conducted pursuant to CWC Section 10632, and (b) the key issues that may create a shortage condition based on the City of Greenfield's (City) water asset. These topics are described in Chapters 6 and 7 of the 2020 UWMP, but are summarized below, recognizing that the WSCP is a standalone document.

The city relies on groundwater to meet the city water supply. The City currently relies on three (3) groundwater wells varying in depth between 800 and 900 feet below ground surface. Historically, these wells have met customer demands through times of drought. Conditions could arise such as unforeseen impacts to the groundwater supply, mechanical failures to city infrastructure and natural disasters that could require the activation of the WSCP.

The City groundwater is part of the Salinas Valley Groundwater Basin (SVGB) – Forebay Aquifer. This Subbasin occupies the central portion of the Salinas Valley and extends from the City of Gonzales to the north to approximately three miles south of Greenfield.

This WSCP requirement is oriented toward water supply systems that are primarily supplied via surface waters and therefore can be directly affected by short-term fluctuations in hydrology (e.g.), drought conditions. The City of Greenfield relies solely on groundwater pumped from the large Forebay Subbasin. Thus, the City of Greenfield water supply availability from this groundwater basin has not historically varied due to short-term hydrological conditions. The minimum water supply available within the driest three-year sequence is expected to match existing and future demands as discussed in the Urban Water Management Plan.

The Forebay is currently the most important source of water for the City of Greenfield. In 2020, the City groundwater withdrawals of 626,182,000 gallons of water (1921.7 ac-ft.) accounted for less than five percent (4.75%) of the estimated sub basin-wide annual extractions of roughly 132,233 + acre-feet/ Given this relatively small percentage, the City of Greenfield's conservation and contingency management activities can play only a small part within the Forebay 2020 Ground Water Extraction Summary Report from the Monterey county Resource Agency.

Groundwater Extraction Form – Data Summary

Total Extractions by Subarea and Type of Use

All data presented in this section are derived from the agricultural and urban Groundwater Extraction Forms.

Table 1. Extraction Data by Subarea and Type of Use.

Subarea	Agricultural Pumping (AF)	Urban Pumping (AF)	Total Pumping (AF)
Pressure	97,821	16,464	**114,285**
East Side	75,125	13,617	**88,742**
Forebay	124,643	7,590	**132,233**
Upper Valley	128,016	2,827	**130,843**
Total (AF)	**425,605**	**40,498**	**466,103**
Percent of Total	**91.3%**	**8.7%**	**100.0%**

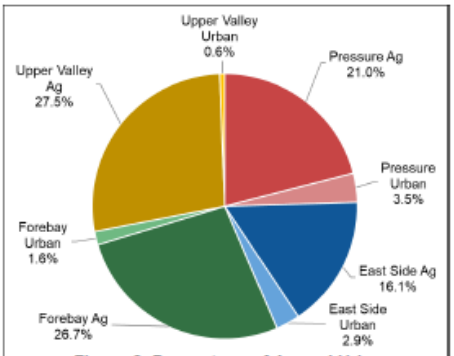

Figure 2. Percentage of Ag and Urban Extractions by Subarea.

Urban Extraction Data by City or Area

The total groundwater extractions attributed to urban use include residential, commercial, institutional, industrial, and governmental pumping, and are summarized below.

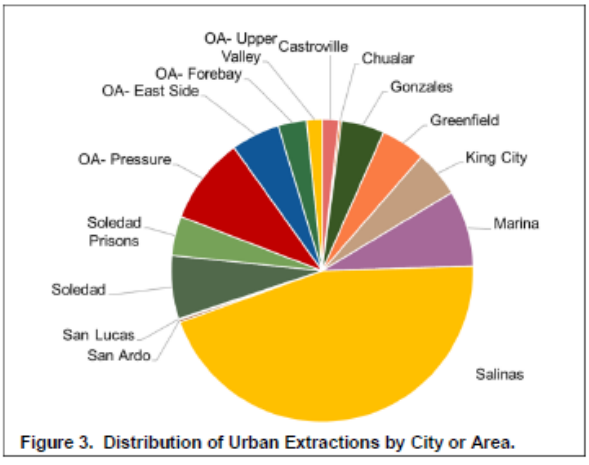

Figure 3. Distribution of Urban Extractions by City or Area.

Table 2. Urban Extractions by City or Area

City or Area	Urban Pumping (AF)	Percentage
Castroville	725	1.79%
Chualar	109	0.27%
Gonzales	1,868	4.61%
Greenfield	1,925	4.75%
King City	2,004	4.95%
Marina	3,296	8.14%
Salinas	18,214	44.97%
San Ardo	110	0.27%
San Lucas	48	0.12%
Soledad	2,735	6.75%
Soledad Prisons	1,695	4.19%
OA- Pressure	3,758	9.28%
OA- East Side	2,111	5.21%
OA- Forebay	1,235	3.05%
OA- Upper Valley	666	1.64%
Total	**40,499**	**100.00%**

OA=Other Area

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The foremost concern in developing appropriate triggers is achieving the maximum practical protection of an adequate long-term water supply of acceptable quality for City of Greenfield customers. To that end, triggering mechanisms should be tied to factors that, directly or indirectly, have the greatest potential effect on the quality and quantity of available groundwater.
The four general types of threats that could cause the City of Greenfield to experience water shortages are as follows:

a. Unanticipated catastrophic system failure, such as earthquake, terrorist attack or sudden contamination of the water supply;' or
b. Chronic system shortage due to lack of maintenance on the water wells such that those wells would have to be removed from service for extended periods of time; or
c. A severe drought condition resulting in the groundwater table dropping below the pumping level; or any water quality that would impacts to drinking water

In case of a catastrophic failure, the City of Greenfield would assess the nature and extent of the failure. The Public Works Director and /or City Manager would identify the appropriate Water Contingency Plan Stage in accordance with the Emergency Response Plan (ERP), including enacting Extreme Shortage Stage 6 Emergency, if required.

The application of fertilizers to agricultural fields in the Salinas Valley have contributed to wide-spread contamination (due to nitrates) of underlying groundwater supplies, which poses a continued and extensive system threat. The City's municipal water supply is in compliance with all state and federal primary drinking water standards.

The City of Greenfield has structured this WSCP to dove-tail with the City's Mandatory Water Conservation Regulations (Chapter 13.09, City Municipal Code), with the primary goal of significantly reducing water supply demands during times of drought and/or low water supply availability, including allowing time for alternative water supply measures, including treatment or drilling of alternate wells.

Section 3 - Annual Water Supply and Demand Assessment Procedures

Water Code Section 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 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.

Water Code Section 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.

Beginning by July 1, 2022, each Supplier shall submit their annual water supply and demand assessment (referred as an Annual Assessment) and submit an Annual Water Shortage Assessment Report to City Council and DWR.. The Annual Assessment and associated reporting are to be conducted based on the Supplier's procedures detailed in the WSCP.

As required by Water Code Section 10632(a), the Supplier's WSCP shall include its specific procedures—akin to an instruction manual— that describe annual steps and timing to complete the Annual Assessment, such that it can be consistently followed year-after-year.,

The Annual Assessment will include the following components:

a) Data and Methodologies
b) Evaluation Criteria
c) Description of Water System
d) Unconstrained Customer Demand
e) Infrastructure Considerations

f) Other Factors
g) Water Supply and Demand Evaluation

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 Greenfield Annual Assessment., which will include documentation of available water supply information. The reporting timeline is shown on Table 1.

Table 1. Annual Assessment Reporting Timeline

Current year				**Following Year**						
Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	By July 1
On-going monitoring and review										
		Initial annual assessment								
				Evaluate Supply						
			Council review of annual assessment							
					Finalize annual assessment					
							Submit annual report			

The Annual Assessment will be compiled by the City each year and brought before council during the second meeting in May or the first meeting in June for review. At the City Council meeting, the Annual Assessment will be presented with any recommendations for specific shortage response or actions. In turn, the City Council will vote to approve/modify or make recommendation to the City's the findings on the Annual Assessment.

The Public Works Director, will implement appropriate water shortage contingency plan response stage(s) as approved by City Council.

3.2 Data and Methodologies

A description of key data inputs and Annual Assessment methodologies used to evaluate the water service reliability for the current year and one dry year, are included in this Section. To be consistent with the most recently prepared 2020 UWMP, the current year is defined as the calendar year (January 1 – December 31) for the year in which the document is prepared and the year to follow is defined as the subsequent calendar year

a) Determine the current year available water supply, considering hydrological and regulatory conditions.

b) Existing infrastructure capabilities and plausible constraints, including assessing production capability of the City's existing three water wells, pumping capacity of the City's two water pumping stations, and storage availability to adequate store and regulate potable water pumped into the City's water distribution system.
c) A description and quantification of each source of water supply, safe yield of the aquifer, and consideration of any water quality parameters that could restrict consumptive use of the water supply.
d) State conservation requirements through implementation/enforcement of the City's water conservation ordinance, and implementation of the WSCP.

3.2.1 Evaluation Criteria

The primary criteria used in preparing the City's Annual Assessment are the projected water demands and available water supply. The Annual Assessment will be conducted based on water supplies, unconstrained water demand, planned water use, and planed infrastructure improvements/maintenance.

3.2.2 Water Supply

Available water supplies for the City shall be quantified each year by summing the capacity of each operational groundwater well. Since the City has not historically been impacted by drought, water shortage conditions, or had any impacts on the safe yield of the groundwater subbasin, the available supply for the subsequent dry year shall be the same as the current year.

3.2.3 Current Year Customer Demand

Billed water consumption is reported monthly and will be used to characterize the current water consumption requirements for the city, also factoring in un-accounted for water (water produced minus water sold/metered). The monthly records will be analyzed with the previous year to address any changes in water consumption. In addition to these records, an update from Building Department on current and future projects will be analyzed. This will enable City staff to estimate changes to water demand in the upcoming year. Water production data will be used to assess un-accounted for water on an annual basis, to understand how much water must be supplied by the City's wells to meet the water consumption needs of the City's customers.

3.2.4 Current Year Available Supply

As mentioned above, the City has not historically been impacted by drought or water shortage conditions. Thus, planned water use for the current year is not expected to be impacted by an anticipated subsequent dry year condition unless such demand impacts the safe yield of the subbasin.

3.2.5 Infrastructure Considerations

The annual assessment will include a review of any ongoing capital projects that are expected to affect the water supply and demand projections. Examples of such capital projects include repairs to the water distribution system to reduce water losses, distribution expansion to serve growth, new storage and pumping facilities to improve water distribution capability to customers, or new groundwater wells to increase the yield and reliability of the City's water supply.

“Water Supply”

“In Potable Water Distribution System Master Plan Update Chapter 5, it was recommended at the city provide at least one new domestic water well (Well #8) in the future. The additional well is needed to ensure water supply reliability for future demands, when the largest well may go out of service. A budget of $2.5 million to cover hard and soft costs should be budgeted. It is envisioned this new well should come on in line within the next several years (Priority 1 Project), in conjunction with the Pinnacles Development. The well is recommended to be located at or near existing Wells 1 and 6 (at 14th Street between Cherry and Walnut Avenues). Information on the existing water transmission main from this existing well site to the existing distribution system (in the vicinity of the Oak Tank and Booster Station) was not available, however the City should evaluate if all three wells (Wells 1, 6 and 7) can operate/pump simultaneously through the transmission main (especially under the scenario where Well 7 is out of service for any reason) without inducing excessive head loss (pressure loss) and thus reduced well pumping capacity.” page 9-4 PWDSMPU

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Section 4 - Six Standard Water Shortage Stages

Water Code Section 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.

Water Code Section 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 outage, 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 levels.

Per California Water Code Section 10632(a)(3), updated 2020, a WSCP must include at least six water shortage stages and cover a possible reduction in supply of more than 50 percent. The 2020 WSCP updates the City's previous 2014 WSCP and Water Conservation Ordinance which included five stages. The stages are determined and recommended by the Public Works Director who assesses severity and anticipated duration of the water supply shortage. The Public Works Director presents the recommended shortage severity stage, for approval and declaration by City Council. The 2014 Greenfield Water Contingency 5 stages will be readdressed as six stages as required with this update. Table 2 is a cross walk from the 2014 plan to New DWR six stages. The new stages determined by the percent water supply shortage are summarized in Table 3.

Table 2: Cross walk from the 2014 Plan to New 2020 DWR Six Stages

2014 WSCP

Stage	% Supply Reduction	Water Supply Condition
1	0% - 10%	Reduction Voluntary
2	10% - 25%	Reduction Voluntary
3	25% - 35%	Reduction Mandatory
4	35% - 50%	Reduction Mandatory
5	> 50%	Reduction Mandatory

New DWR 2020 Stages

DWR Standard Shortage Stage	Water Supply Conditions	Water Supply Condition
1	up to 10 %	Reduction Voluntary
2	up to 20%	Reduction Voluntary
3	up to 30%	Reduction Mandatory
4	up to 40%	Reduction Mandatory
5	up to 50%	Reduction Mandatory
6	> 50 %	Reduction Mandatory

Table 3: Stages of Water Shortage Contingency Plan			
Stage	**Percentage Supply Shortage**	**Severity**	**Water Supply Conditions**
1	**Up to 10%**	**Potential Shortage (Voluntary)**	**Annual Assessment**
2	**Up to -20%**	**Minor Shortage (Voluntary)**	**System malfunction (Booster Pump Station)**
3	**Up to -30%**	**Moderate Shortage (Mandatory)**	**Water loss during production resulting from failure of one (1) well (maintenance or repairs)**
4	**Up to -40%**	**Severe Shortage (Mandatory)**	**System malfunction and water loss during production resulting from failure of one (1) well.**
5	**Up to-50%**	**Critical Shortage (Mandatory)**	**1.System Malfunction or loss of water production resulting from loss of two (2) wells (maintenance or repairs)**
6	**>50%**	**Extreme Shortage (Mandatory)**	**1.System Malfunction or extreme loss of water production.**

Section 5 – Shortage Response Actions

Water Code Section 10632 (a)(4)

Shortage response actions that align with the defined shortage levels and include, at a minimum, all 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.

5.1 Supply Augmentation

The City currently relies on groundwater to meet demand requirements within the service area 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 WSCP at this time. The City's current storage tanks could supply water for several days of demand in the event of a catastrophic event. The City's Water Master Plan recommended enough water storage to supply each resident with 50 gallons per person per day, for a total of three consecutive days, to provide enough potable water for sanitary purposes in the event of a catastrophic or emergency event that restricts water production.

5.2 Demand Reduction

The City of Greenfield Municipal Ordinance Title 13 Utilities Services, Chapter 13.09, Mandatory Water Conservation Regulations, were enacted to address the City's authority to mandate water conservation during times of water supply shortages. The purpose of this Chapter is to increase public awareness of the need for water conservation; to provide regulations and restrictions on the delivery of water and the consumption within the City limits; to give the City authority to enforce mandatory restrictions on water wasting/usage including levying of penalties for noncompliance, and water rate hikes to strongly encourage conservation. City staff will mandate water conservation for the protection of public health and safety, as follows: 1) conserve water supply for the greatest public benefit with particular regard to domestic use, sanitation, and fire protection, and 2) ensure compliance with water regulations of other governmental agencies of appropriate jurisdiction including the State Division of Drinking Water (DDW). The following is an abbreviated list of permanent best management practices (BMPs) from the Ordinance;

a) Repair of Plumbing, Sprinkler, and Irrigation Systems.
b) Washing of Vehicles: No person shall use a water hose to wash any car, truck, boat, trailer, bus, recreational vehicle, camper, aircraft, tractor, or any other vehicle, or any portion thereof, with potable water, unless the hose is equipped with an automatic shutoff nozzle.
c) Cleaning of Structures: No person shall use potable water through a hose to clean the exterior of any building or structure unless such hose is equipped with a shutoff nozzle.

d) Cleaning of Surfaces: No person shall use potable water through a hose to clean any sidewalk, driveway, roadway, parking lot, or any other outdoor paved or hard surfaced area, except where necessary to protect public health and safety.
e) Water Spillage: No person shall cause, suffer, or permit water to spill into streets, curbs, or gutters.

5.3 Operational 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, reducing, or halting line flushing during water shortage conditions, alteration in maintenance cycles, and expediting water leak repairs.

Stage 1: Up to 10% - Potential Shortage– Volunteer Conservation

- Voluntary water conservation requested of all customers Adhere to Chapter 13.09 Mandatory Water Conservation Regulations (Appendix A)
- Recommending that Landscape irrigation be limited to early morning and late evening
- Discourage non-essential water uses (cleaning of structures and/or surfaces)
- Require shutoff nozzles on all hoses.
- Encourage conversion to drip, low volume irrigation.
- Notify all customers of the water shortage.
- Provide technical information to customers on ways to improve water use efficiency.
- Campaign to remind consumers of the need to save water and restrict all landscape irrigation to certain hours of the day.

Stage	Type of Use	Restrictions	Reduce Shortage Gap	Penalty, Charge or Other Enforcement?
1	Outdoor washing of cars, buildings, and surfaces	Encourage shutoff nozzles on all hoses used.	1%	No
1	Landscape - Other landscape restriction or prohibition	The application of potable water to outdoor landscapes during and up to within 48 hours after measurable rainfall.	1%	No
1	Landscape irrigation to specific times	Landscape irrigation before 11 am and after 6 pm is encouraged.	1%	No

Stage 2: up to 20% - Minor Shortage – Volunteer Conservation

- **All recommended measures of Stage 1 remain in effect. Additional recommendations include:**
- Expanding Water Conservation efforts
- Intensify public information campaign
- Encourage limiting landscape irrigation to specified times.
- Send direct notices to all customers via customer water bills
- Prohibit exterior washing of structures
- Dining establishments are not to serve water unless requested

Stage	Type of Use	Restrictions	Reduce Shortage Gap	Penalty
2	Landscape - Other landscape restriction or prohibition	Landscape irrigation after 11 am and before 6 pm is not recommended	2%	No
2	Exterior washing of structures	Encourage customers to refrain from exterior washing of structures Except for health and safety	2%	No
2	Dining establishments/human consumption	Serve water at dining establishments only upon request	1%	No

Stage 3: up to 30% Moderate Shortage (Mandatory Conservation)

Conservation measures shall be called for because of malfunction of any portion of the water system that reduces supplies by up to 30% on a daily, peak seasonal or annual basis. It also may be called due to prolonged drought conditions and a need to focus public attention on water conservation methods. All requirements of Stages 1 and 2 become mandatory restrictions.

Enforcement procedures and penalties for wasting water are enforced as described in the Greenfield Water Conservation Ordinance Sections 13.09.040 and 13.09.060.

Stage	Type of Use	Restrictions	Reduce Shortage Gap	Penalty
3	Existing Landscapes, including Public Parks	Landscape watering with potable water shall be subject to the following restrictions: 1) Landscape watering using sprinklers or irrigation systems is permitted only two days per week. Addresses ending in even numbers (0, 2, 4, 6, 8,) may water on Mondays and Thursdays. 2) Addresses ending in odd numbers (1, 3, 5, 7, and 9) may water on Tuesdays and Fridays. If there is no street address, or if more than one street address is associated with a contiguous property, the irrigation days are Wednesday and Saturday. .	5%	Yes
3	New Landscaping Irrigation	Landscape watering with potable water shall be subject to the following restrictions: 1) Landscape watering is permitted to maintain adequate growth on newly installed landscapes, for a period generally up to five (5) weeks. Property owners must notify the Utilities Division of the address where new landscape is installed and the date of installation. 2) Following the initial establishment period, landscape watering using a sprinkler or irrigation system is permitted only on days associated with the current conservation stage in effect.	5%	Yes
3	Hotels, motels and bed and breakfasts	Hotels, Motels and B&Bs must offer and clearly notify guests of a “limited linen/towel exchange” program.	5%	Yes

3	Swimming pools, hot tubs	Initial filling of new and existing swimming pools is prohibited. Draining and refilling existing swimming pools is permitted only if repairing a pool leak or repairing, maintaining or replacing a pool component that has become hazardous. All pools and tubs shall be covered when not in use to reduce evaporation.	5%	Yes
3	Industrial and Commercial	Reduction of water use by any means is required d. Compliance with mandatory demand reduction measures is required for outdoor water uses including landscape irrigation, swimming pools, and vehicle washing.	5%	Yes
3	Vehicle and Equipment Washing	Non-commercial washing of vehicles and mobile equipment (e.g., washing a vehicle at a residence) is permitted only on assigned landscape watering days during landscape watering hours (before 11:00 a.m. or after 6:00 p.m.). Fleet managers are required to only wash those vehicles as is necessary for health and safety.	5%	Yes
3	Construction	The use of potable water for dust control shall be reduced to the greatest extent possible.	5%	Yes

Stage 4. Up to 40 % Severe Shortage (Mandatory Conservation)

Stage 4 Mandatory Conservation measures will be called for because of malfunction of any portion of the water system that reduces supplies by up to 40% on a daily, peak seasonal or annual basis. It also may be called due to prolonged drought conditions and a need to focus public attention on water conservation.

Enforcement procedures and penalties for water wasting continues as described in the Greenfield Water Conservation Ordinance Sections 13.09.040 and 13.09.060.

Stage	Type of use	Restrictions	Reduce Shortage Gap	Penalty
4	Existing Landscapes, including Public Parks	Landscape watering using sprinkler or irrigation systems is permitted only one day per week. 1) Addresses ending in numbers 0 or 1 may water on Mondays. 2) Addresses ending in numbers 2 or 3 may water on Tuesdays. 3) Addresses ending in numbers 4 or 5 may water on Wednesdays. 4) Addresses ending in numbers 6 or 7 may water on Thursdays. 5) Addresses ending in numbers 8 or 9 may water on Fridays. 6) If there is no street address, or if more than one street address is associated with a contiguous property, the irrigation day is Wednesday. 7) No irrigation is allowed on Saturdays or Sundays? Manual landscape watering with a soaker hose, handheld hose or watering can/bucket is allowed on any day.	Up to 20%	Yes
4	New landscaping Irrigation	Landscape watering with potable water shall be subject to the following restrictions: 1) Landscape watering is permitted three (3) days a week to maintain adequate growth on newly installed landscapes, for a period generally up to five (5) weeks. Watering days for new landscapes are Tuesday, Thursday and Saturday. Property owners must notify the Utilities Division of the address where new landscape is installed and the date of installation. 2) Following the initial establishment period, landscape watering using a sprinkler or irrigation system is permitted only on a single day per week based on address.	Up to 20%	Yes

4	Hotels, motels and bed and breakfasts	Hotels, Motels and B&Bs must limit linen/towel exchange to once every two (2) nights or for the entire stay, whichever is shorter, except for health and safety program	Up to 20%	Yes
4	Swimming pools, hot tubs	Initially filling new and existing swimming pools prohibited. Draining and refilling existing swimming pools are not permitted after making repairs on pool leak or repairing, maintaining or replacing a pool component that has become hazardous. All pools and tubs shall be covered when not in use to reduce evaporation	Up to 20%	Yes
4	Industrial and Commercial	Compliance with mandatory demand reduction measures is required for outdoor water uses including landscape irrigation,.	Up to 20%	Yes
4	Construction	The use of potable water for dust control shall be prohibited during this stage.. The City may establish mandatory construction water budgets, if needed	Up to 20%	Yes

Stage 5. Critical Shortage (Mandatory Rationing)

Appropriate 50% water shortage allotments shall be calculated, and customers noticed of the ration volume/quantity per person. Appropriate administration and enforcement of this stringent program shall be the highest priority of the Utilities Division activity. Water rates may be further increased by the City Council, as a means of enforcing mandatory rationing during Stage 5 water shortages.

Enforcement procedures and penalties for water wasting continues as described in the Greenfield Water Conservation Ordinance Sections 13.09.040 and 13.09.060.

Stage	Type of use	Restrictions	Reduce Shortage Gap	Penalty
5	Existing Landscapes, including Public Parks	Landscape watering with potable water is prohibited	Up to 40%	Yes

5	New landscaping Irrigation .	The installation of new landscapes to be irrigated with potable water is prohibited. No landscape shall be installed during declaration of Conservation Stage 5	Up to 30%	Yes
5	Hotels, motels and bed and breakfasts	Hotels, Motels, and B&Bs must limit linen/towel exchange to once every three (3) nights or for the entire stay, whichever is shorter,	Up to 30%	Yes
5	Swimming pools, hot tubs	Filling new and existing swimming pools and/or draining and refilling existing swimming pools is prohibited. All pools and tubs shall be covered when not in use to reduce evaporation. Contact Utilities Division staff if an existing swimming pool must be repaired and refilled during Conservation Stage 5.	Up to 30%	Yes
5	Industrial and Commercial	Reduction of water use by any means is required . The City Council may establish mandatory use reduction targets, if needed. Compliance with mandatory demand reduction measures is required for outdoor water uses including landscape irrigation, swimming pools, and vehicle washing.	Up to 30%	Yes
5	Vehicle and Equipment Washing	The use of potable water for dust control shall be reduced to the greatest extent possible. The City may establish mandatory construction water budgets, if needed.	Up to 30%	Yes
5	Water Rates	Raise water rates to strongly encourage water conservation in households.	?	Yes

Stage 6: Extreme Shortage (Mandatory Rationing)

During Stage 6, the water supply shortage is over 50 percent and a greater reduction in water usage is required for the City to meet the immediate needs of its customers. The City continues its public information and education programs and urges customers to achieve a 50 percent or greater mandatory water use reduction. Water rate hikes for higher water use will need to be employed during this time, to further promote strict water conservation measures City-wide.

A special City Council meeting may be called to determine if Mandatory Rationing is necessary to further reduce water used. All previous requirements of Stages 1, 2, 3, 4, and 5 remain in effect. Additional requirements may include:

Enforcement procedures and penalties for water wasting continue as described in the Greenfield Water Conservation Ordinance Sections 13.09.040 and 13.09.060.

Stage	Type of use	Restrictions	Reduce Shortage Gap	Penalty, Charge or Other Enforcement?
6	Other	Non-essential use of water prohibited.	Up to 40%	Yes
6	Other	Per Capita Allotment by customer type. Water rates structured to highly encourage strict water conservation in households.	Up to 40%	Yes

5.4 Additional Mandatory Restrictions

Additional mandatory restrictions may be imposed by City Council.

5.5 Emergency Response Plan

The Water Code Section 10632(c) requires development of an Emergency Response Plan documenting actions to be undertaken by the water supplier to prepare for and implement during a catastrophic interruption of water supplies. The City is currently in the process of updating its Emergency Operations Plan (EOP), most recently updated in 2004, that provides a framework for the City to address a catastrophic supply interruption due to various hazards, including seismic, geological, wildfire, and flooding hazards. This plan is intended to define the actions required of the City before, during, and after an emergency. The City will develop an ERP, which includes appropriate personnel listings, resource inventories, locations for emergency operations centers, response procedures, and the steps necessary to resume normal operations. It also guides the City's response to major emergencies and disasters.

The City maintains a preventative maintenance program for its distribution system. Auxiliary generators are available at each water facility site to minimize loss of these facilities during an earthquake or any

disaster causing an electric power outage. Permanent generators are provided at all sites with water supply wells/pumps and booster pump stations.

5.6 Seismic Risk Assessment and Mitigation Plan

Seismic Risk was assessed in the City's America's Water Infrastructure Act Risk and Resilience Assessment (Wallace Group, 2021). The Risk and Resilience Assessment states the City is located within the Central Coast which is a relatively moderate to high seismically active area. The City is located within the Rinconada Fault Zone. Seismic hazards are dependent on the distance to the fault and the intensity and magnitude of the seismic event. Based on the City's location, seismic activity is a major threat to the water system. While it is expected that the City will experience some seismic activity, the risk of catastrophic damage to the water system (including the City's wells and storage tanks) is moderate to low. Therefore, seismic risk does appear to be a high consequence risk or high likelihood event.

Section 6 – Communication Protocols

Water Code Section10632 (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 plans for short-term water use reduction 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 Facebook, twitter, 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 Stage 2 Minor Water Shortage and would increase in frequency in the event of a Stage 3 and higher Water Shortage.

Section 7 – Compliance and Enforcement

Water Code Section10632 (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.

In order to encourage cooperative efforts to achieve water conservation, it shall be the policy of the City to have verbal communication with the public, when an alleged violation is first noted. Such warning shall include an explanation of the violation.

Chapter 13.09.050 of the Municipal Code provides for a system for issuing warnings and to correct the violation. Subsequently, in accordance with Chapter 13.09.060, any violation that occurs or continues from one day to the next shall be deemed a separate violation, for each day during which such violation occurs or continues to occur. The fine for a first violation of this chapter shall be fifty dollars ($50.00). The fine for a second violation and each subsequent violation of this chapter within a period of twelve (12) months, regardless of the specific section or subsection violated, shall be one hundred dollars ($100.00).

Section 8 – Legal Authorities

Water Code Section 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.

The City's legal authority to mandate water conservation is contained in Municipal Ordinance Chapter 13.09, "Mandatory Water Conservation Regulations:

- "The Public Works Director shall develop and implement any programs, plans, directives, and regulations necessary for such compliance, including, but not limited to, any water shortage contingency plan or other plan or program adopted by the city pursuant to any federal, state, or county agency or regulatory authority requirement."

- Implementation of the Water Shortage Contingency Plan and its stages shall be determined by the Public Works Director. Shortage response actions that are implemented shall be enforced and violations imposed by the City staff. In accordance with Water Code Division 1, Section 350, the City shall declare a water shortage emergency when water supply conditions reach a supply reduction of 10 percent (Stage 1) or greater. The City does not provide water supply to any other city. The City could coordinate with Monterey County for the possible proclamation of a local water supply emergency per California Government Code, California Emergency Services Act, Article 2, Section 8558.

Section 9 – Financial Consequences of WSCP Activation

Water Code Section10632 (a) (8)
A description of the financial consequences of, and responses for, drought conditions, including, but not limited to, all 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]

The City has established an accounting system for tracking expenses and revenue shortfalls associated with voluntary and mandatory water use reductions implemented through WSCP implementation actions. The City maintains reserve funds that can be used to offset expenditure impacts during times of emergency. Further, the City Manager (and City Council) could implement a Water Surcharge upon triggering of a WSCP declaration to recover unmitigated revenue shortfalls resulting from the costs of additional water shortage response measures and actions. The water surcharge would only be in effect during the declared water shortage condition. Any water related surcharges would be approved by the City Council, validating the need for the surcharges, and identifying appropriate costs to be covered through any approved surcharges to support WSCP implementation.

Section 10 - Monitoring and Reporting

Water Code Section10632 (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.

The City records daily water production and monthly metered usage throughout the year. Daily production figures are reported monthly to the State Water Resources Control Board (Water Board) Office of Research, Planning, and Performance (dwpdist05@waterboards.ca.gov) and in the Annual Report to the Drinking Water Program, which is submitted to the Water Board Division of Drinking Water (DDW) each year.

The City will track water production and meter data closely to determine the actual water savings made during each stage and use this information to calculate water savings. By monitoring the water savings, the City can adjust its response to the water shortage for each water user class and how this will affect the water shortages stages.

Section 11 - WSCP Refinement Procedure

Water Code Section10632 (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

Based on analysis of the data collected, the City may choose to modify or add consumption reduction methods to more effectively meet water level targets. The City's WSCP can be refined and updated at any time, independent of when UWMPs are updated every five years.

Any updates to the WSCP will be approved by the City Council as needed to maintain an effective water shortage response plan for the community. Any WSCP updates will allow for stakeholder review and be publicly noticed before any City Council action is considered at a City Council meeting. The WSCP documents and any updated information will be available on the City's website.

Section 12: Special Water Feature Distinction

Water Code Section10632 (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 City does not currently have any special water features of distinction that would be involved in a WSCP response effort**.**

Section 13 – Plan and Adoption, Submittal and Availability

Water Code Section10632 (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.