

# City of Loma Linda Draft Water Shortage Contingency Plan

JUNE 2021

City of Loma Linda





CITY OF LOMA LINDA

---

# Draft Water Shortage Contingency Plan

## City of Loma Linda

**JUNE 2021**

Prepared by Water Systems Consulting, Inc.



# TABLE OF CONTENTS

---

List of Figures .....	ii
List of Tables .....	iii
Acronyms & Abbreviations .....	iv
City of Loma Linda .....	1
1.0 Water Service Reliability Analysis .....	3
2.0 Annual Water Supply and Demand Assessment .....	3
3.0 Water Shortage Stages .....	6
4.0 Shortage Response Actions.....	7
4.1 Supply Augmentation.....	7
4.2 Demand Reduction.....	8
4.3 Operational Changes and Additional Mandatory Restrictions .....	10
4.4 Emergency Response Plan.....	11
4.5 Seismic Risk Assessment and Mitigation Plan.....	11
4.6 Shortage Response Action Effectiveness .....	11
5.0 Communication Protocols.....	11
6.0 Compliance and Enforcement .....	11
7.0 Legal Authorities.....	12
8.0 Financial Consequences of WSCP.....	12
9.0 Monitoring and Reporting .....	13
10.0 WSCP Refinement Procedures.....	13
11.0 Plan Adoption, Submittal and Availability .....	13
References .....	15
Attachment 1: City of Loma Linda - Ordinance 443	
Attachment 2: Adoption Resolution	

# LIST OF FIGURES

---

Figure 1. Regional and Retail Agency Annual Assessment Process and Timeline.....5  
Figure 2. Crosswalk to DWR Six Standard Stages .....7

# LIST OF TABLES

---

Table 1. Annual Assessment Procedure.....4  
Table 2: DWR 8-1 Water Shortage Contingency Plan Stages .....7  
Table 3: DWR 8-3R Supply Augmentation & Other Actions .....8  
Table 4: DWR 8-2 Demand Reduction Actions..... 8

# ACRONYMS & ABBREVIATIONS

---

AWIA	American Water Infrastructure Association
BTAC	Basin Technical Advisory Committee
CWC	California Water Code
CII	Commercial, Industrial, and Institutional
DWR	California Department of Water Resources
DRA	Drought Risk Assessment
ERP	Emergency Response Plan
GW	Groundwater
IRUWMP	Integrated Regional Urban Water Management Plan
RRA	Risk and Resilience Assessment
SWP	State Water Project
UWWP	Urban Water Management Plan
WSCP	Water Shortage Contingency Plan

## WATER SHORTAGE CONTINGENCY PLAN

# City of Loma Linda

**This Water Shortage Contingency Plan is a strategic plan that the City of Loma Linda (Loma Linda) uses to prepare for and respond to water shortages.**

A water shortage occurs when water supply available is insufficient to meet the normally expected customer water use at a given point in time. A shortage may occur due to a number of reasons, such as water supply quality changes, climate change, drought, regional power outage, and catastrophic events (e.g., earthquake). Additionally, the State may declare a statewide drought emergency and mandate that water suppliers reduce demands, as occurred in 2014. The WSCP serves as the operating manual that Loma Linda will use to forecast and prevent catastrophic service disruptions through proactive, rather than reactive, mitigation of water shortages. This WSCP provides a process for an annual water supply and demand assessment and structured steps designed to forecast and respond to actual conditions. This level of detailed planning and preparation provides accountability and predictability to help Loma Linda maintain reliable supplies and reduce the impacts of any supply shortages.

This WSCP was prepared in conjunction with Loma Linda's 2020 Urban Water Management Plan (UWMP), which is included in the 2020 Upper Santa Ana River Watershed Integrated Regional Urban Water Management Plan (2020 IRUWMP) and is a standalone document that can be modified as needed. This document is compliant with the California Water Code (CWC) Section 10632 and incorporated guidance from the State of California Department of Water Resources (DWR) UWMP Guidebook.

### IN THIS SECTION

- Water Service Reliability
- Annual Water Supply and Demand Assessment
- Supply Shortage Stages and Response Actions

The WSCP describes the following:

1. **Water Service Reliability Analysis:** Summarizes Loma Linda's water supply analysis and reliability and identifies any key issues that may trigger a shortage condition.
2. **Annual Water Supply and Demand Assessment Procedures:** Describes the key data inputs, evaluation criteria, and methodology for assessing the system's reliability for the coming year and the steps to formally declare any water shortage stages and response actions.
3. **Water Shortage Stages:** Establishes water shortage stages to clearly identify and prepare for shortages.
4. **Shortage Response Actions:** Describes the response actions that may be implemented or considered for each stage to reduce gaps between supply and demand.
5. **Communication Protocols:** Describes communication protocols under each stage to ensure customers, the public, and government agencies are informed of shortage conditions and requirements.
6. **Compliance and Enforcement:** Defines compliance and enforcement actions available to administer demand reductions.
7. **Legal Authority:** Lists the legal documents that grant Loma Linda the authority to declare a water shortage and implement and enforce response actions.
8. **Financial Consequences of WSCP Implementation:** Describes the anticipated financial impact of implementing water shortage stages and identifies mitigation strategies to offset financial burdens.
9. **Monitoring and Reporting:** Summarizes the monitoring and reporting techniques to evaluate the effectiveness of shortage response actions and overall WSCP implementation. Results are used to determine if shortage response actions should be adjusted.
10. **WSCP Refinement Procedures:** Describes the factors that may trigger updates to the WSCP and outlines how to complete an update.
11. **Plan Adoption, Submittal, and Availability:** Describes the process for the WSCP adoption, submittal, and availability after each revision.



## 1.0 Water Service Reliability Analysis

As part of the 2020 IRUWMP, Loma Linda completed a water supply reliability analysis for normal, single-dry, and five-year consecutive dry year periods from 2025-2045. A Drought Risk Assessment (DRA) was also performed to analyze supply reliability under five consecutive years of drought from 2021-2025. As described in [Chapter 3](#) of the 2020 IRUWMP, the effects of a local drought are not immediately recognized since the region uses the local groundwater basins to simulate a large reservoir for long term storage. Loma Linda is able to pump additional groundwater to meet increased demands in dry years and participates in efforts to replenish the basins with imported and local water through regional recharge programs. Additionally, Loma Linda implements several ongoing water conservation measures. Regional recharge programs and conservation help to optimize and enhance the use of regional water resources. **Based on the 2020 IRUWMP analysis, Loma Linda's water supply is reliable and not expected to see impactful change under drought conditions.**

Even though localized drought conditions should not affect supply, other shortages may occur due to a number of reasons, such as water supply quality changes, regional power outage, State mandates for water use efficiency standards, and catastrophic events (e.g., earthquake). Therefore, Loma Linda will use this WSCP as appropriate to address shortages and other supply emergencies.

## 2.0 Annual Water Supply and Demand Assessment

As an urban water supplier, Loma Linda must prepare and submit an Annual Water Supply and Demand Assessment (Annual Assessment). Starting in 2022, the Annual Assessment will be due by July 1 of every year, as indicated by CWC Section 10632.1. The Annual Assessment is an evaluation of the near-term outlook for supplies and demands to determine whether the potential for shortage exists and whether there is a need to trigger a WSCP shortage stage and response actions in the current calendar year to maintain supply reliability. This process will take place at the same time each year based on known circumstances and information available to Loma Linda at the time of analysis and can be updated or revised at any time if circumstances change.

Loma Linda will establish and convene an internal WSCP Team to conduct the Annual Assessment each year. The WSCP may include the following staff:

- **Utilities Superintendent**
- **Finance**

The Annual Assessment procedure, including key data inputs and evaluation criteria, is summarized in [Table 1](#). The Annual Assessment procedure and timeline, along with how it integrates with the annual assessment that will be conducted on a regional basis in parallel, is shown graphically in [Figure 1](#).

**Table 1. Annual Assessment Procedure**

TIMING	ASSESSMENT ACTIVITIES	PROCEDURE, KEY DATA INPUTS, EVALUATION CRITERIA AND OTHER CONSIDERATIONS	STAFF RESPONSIBLE
JAN - FEB	Estimate unconstrained demands for coming year	Demands will be estimated based on water sales forecasts from annual budget or prior year demands plus any anticipated changes	WSCP Team
JAN - FEB	Estimate available supplies for the year, considering the following year will be dry	The BTAC evaluates groundwater in storage each year. The Bunker Hill basin is sustainably managed to provide storage for use in dry years. In the unlikely event that local supplies are reduced, Loma Linda will coordinate with the BTAC to identify anticipated supplies.	Utilities Superintendent
JAN - FEB	Consider potential constraints that may impact supply delivery	<p>Identify any known regional or Loma Linda infrastructure issues that may pertain to near-term water supply reliability, including repairs, construction, and environmental mitigation measures that may temporarily constrain capabilities, as well as any new projects that may add to system capacity.</p> <p>Identify any facilities out of service due to water quality problems, equipment failure, etc. that may impact normal water deliveries.</p> <p>Identify any potential or emerging impacts to groundwater quality, such as emerging regulatory constraints that may limit use of available supplies for potable needs.</p>	Utilities Superintendent
FEB	Convene WSCP Team to conduct Annual Assessment	<p>Compare supplies and demands and discuss any constraints that may impact supply delivery. If the potential for a shortage exists, determine which shortage response stage and actions are recommended to reduce/eliminate the shortage.</p> <p>Additionally, if the State declares a drought state of emergency and requires demand reductions, the WSCP Team will determine which water shortage stage and response actions are needed to comply with the State mandate.</p>	WSCP Team

TIMING	ASSESSMENT ACTIVITIES	PROCEDURE, KEY DATA INPUTS, EVALUATION CRITERIA AND OTHER CONSIDERATIONS	STAFF RESPONSIBLE
<b>JUNE</b>	City Council	If the potential for a shortage exists or the State has mandated demand reductions, the results of the Annual Assessment will be presented to the Loma Linda City Council, including the recommended shortage stage and response actions. The City Council may order the implementation of a shortage stage and will adopt a resolution declaring the applicable water shortage stage.	City Manager & Council
<b>ON-GOING</b>	Implement WSCP actions, if needed	Relevant members of Loma Linda staff will implement shortage response actions associated with the declared water shortage stage	WSCP Team
<b>BY JULY 1</b>	Submit Retail Annual Assessment	Send Final Retail Annual Assessment to DWR	WSCP Team

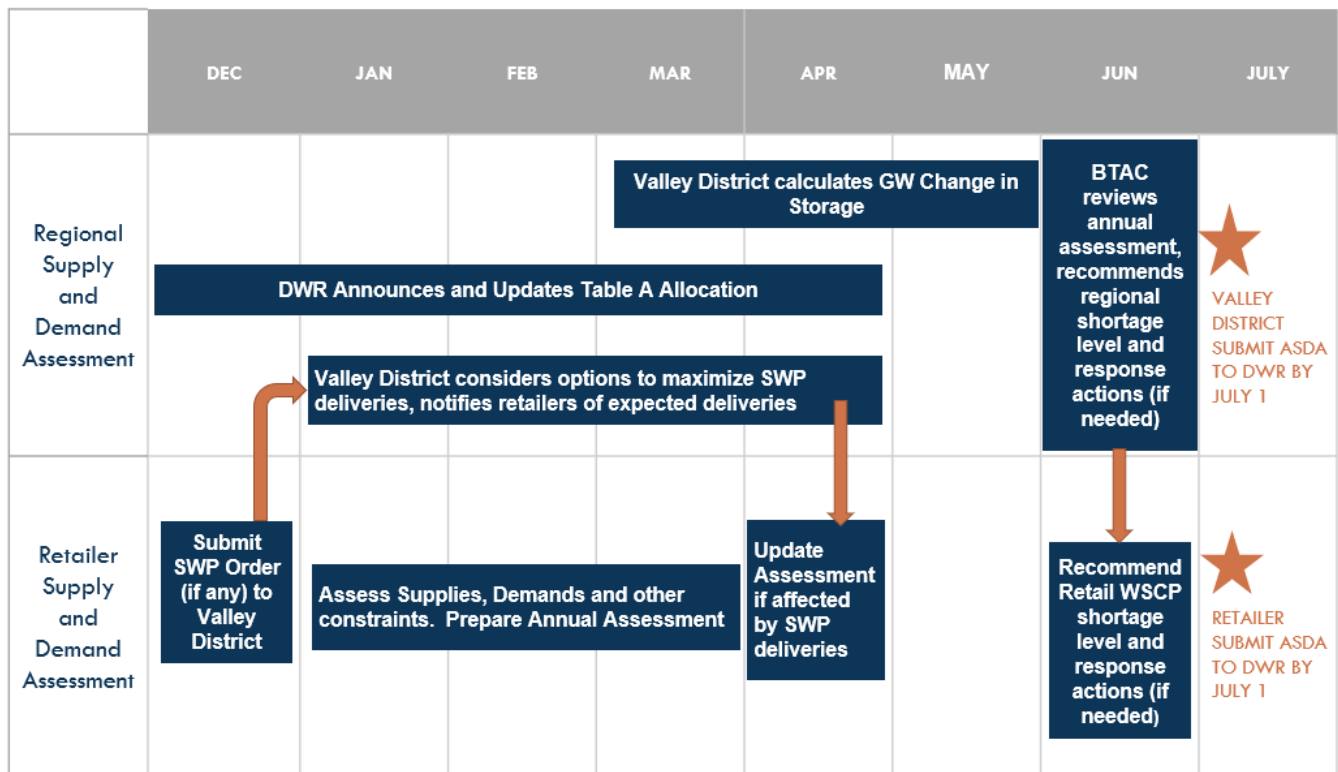


Figure 1. Regional and Retail Agency Annual Assessment Process and Timeline

### 3.0 Water Shortage Stages

With the exception of a catastrophic failure of infrastructure, Loma Linda does not foresee imposing a water shortage stage except under the State's direction, as occurred in 2014. If a potential water shortage is identified in the Annual Assessment, this section provides information on the water shortage stages and response actions that Loma Linda may implement.

Loma Linda uses three (3) shortage stages to identify and respond to water shortage emergencies. At a minimum, Loma Linda encourages baseline conservation efforts year-round, regardless of a shortage emergency.

#### **Stage I: Normal Conditions - Voluntary Conservation Measures**

Normal conditions shall be in effect when Loma Linda is able to meet all the water demands of its customers in the immediate future. During normal conditions, all water users should continue to use water wisely, to prevent the waste or unreasonable use of water, and to reduce water consumption to the amount necessary for ordinary domestic and commercial purposes.

#### **Stage II: Threatened Water Supply Shortage**

In the event of a threatened water supply shortage which could affect Loma Linda's ability to provide water for ordinary domestic and commercial uses, the City Council shall hold a public hearing at which consumers of the water supply shall have the opportunity to protest and to present their respective needs to Loma Linda. The City Council may then, by resolution, declare a water shortage condition to prevail, and the selected shortage response actions shall be in effect.

#### **Stage III: Water Shortage Emergency - Mandatory Conservation Measures**

In the event of a water shortage emergency in which Loma Linda may be prevented from meeting the water demands of its customers, the City Council shall, if possible given the time and circumstances, immediately hold a public hearing at which customers of Loma Linda shall have the opportunity to protest and to present their respective needs to the City Council. No public hearing shall be required in the event of a breakage or failure of a pump, pipeline, or conduit causing an immediate emergency. The Director of Public Services is empowered to declare a water shortage emergency, subject to the ratification of the City Council within seventy-two hours of such a declaration.

The CWC outlines six standard water shortage stages that correspond to a shortage compared to normal year availability. The six standard water shortage stages correspond to progressively increasing estimated shortage conditions (up to 10-, 20-, 30-, 40-, 50-percent, and greater than 50-percent shortage compared to the normal reliability condition) and align with the response actions that a water supplier would implement to meet the severity of the impending shortages.

The CWC allows suppliers with an existing WSCP that uses different water shortage stages to comply with the six standard stages by developing and including a cross-reference relating its existing shortage categories to the six standard water shortage stages. Loma Linda is maintaining the current three shortage stages for this WSCP. A crosswalk defines how Loma Linda's current water shortage stages will align with the DWR's standardized 6 stages of shortage. A visual representation of this alignment is shown in [Figure 2](#).

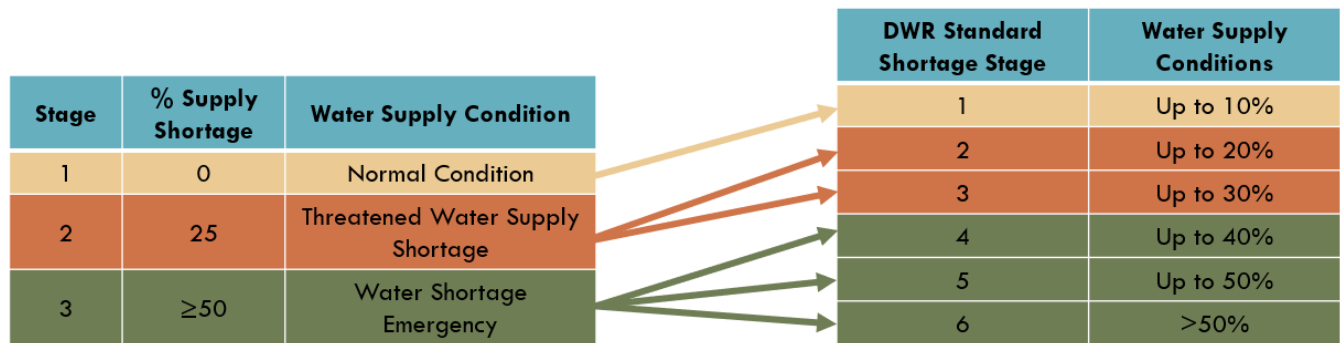


Figure 2. Crosswalk to DWR Six Standard Stages

Table 2: DWR 8-1 Water Shortage Contingency Plan Stages

SHORTAGE STAGE	PERCENT SHORTAGE RANGE <sup>1</sup> (NUMERICAL VALUE AS A PERCENT)	WATER SHORTAGE CONDITION
1	Up to 10%	Normal Conditions (Loma Linda Stage 1)
2	Up to 20%	Threatened Water Supply Shortage (Loma Linda Stage 2)
3	Up to 30%	Threatened Water Supply Shortage (Loma Linda Stage 2)
4	Up to 40%	Water Shortage Emergency (Loma Linda Stage 3)
5	Up to 50%	Water Shortage Emergency (Loma Linda Stage 3)
6	>50%	Water Shortage Emergency (Loma Linda Stage 3)

<sup>1</sup> One stage in the Water Shortage Contingency Plan must address a water shortage of 50%.

## 4.0 Shortage Response Actions

This section was completed pursuant to CWC Section 10632(a)(4) and 10632.5(a) and describes the response actions that may be implemented for each stage to minimize social and economic impacts to the community.

In accordance with CWC 10632(b) Loma Linda analyzes and defines water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas.

### 4.1 Supply Augmentation

Table 3 identifies the supply augmentation actions Loma Linda can take in the event of a water shortage condition. Loma Linda currently maintains interconnections with the City of Redlands and the City of San Bernardino. During water shortage emergencies, Loma Linda may be able to obtain supplemental water supply through these connections, if available.

**Table 3: DWR 8-3R Supply Augmentation & Other Actions**

SHORTAGE STAGE	SUPPLY AUGMENTATION METHODS AND OTHER ACTIONS BY WATER SUPPLIER	HOW MUCH IS THIS GOING TO REDUCE THE SHORTAGE GAP?	ADDITIONAL EXPLANATION OR REFERENCE
3	Other purchases	0-100%	Emergency connection with the City of Redlands
3	Other purchases	0-100%	Emergency supply connection with the City of San Bernardino

## 4.2 Demand Reduction

In addition to prohibitions on end uses, Loma Linda offers various programs to encourage conservation. Loma Linda has a water rate structure that promotes water efficiency. The reduction goal is to balance supply and demand. [Table 4](#) summarizes these efforts and end use prohibitions.

**Table 4: DWR 8-2 Demand Reduction Actions**

SHORTAGE STAGE	DEMAND REDUCTION ACTIONS	HOW MUCH IS THIS GOING TO REDUCE THE SHORTAGE GAP?	ADDITIONAL EXPLANATION OR REFERENCE	PENALTY, CHARGE, OR OTHER ENFORCEMENT
All	Expand Public Information Campaign	0-20%		No
2	Other	0-20%	Commercial and industrial facility education on water use.	No
2	CII - Restaurants may only serve water upon request	0-1%	Restaurants are requested not to provide drinking water to patrons except by request.	Yes
2	Landscape - Limit landscape irrigation to specific days	5-10%	Upon notice and public hearing, Loma Linda may determine that the irrigation of exterior vegetation shall be conducted only during specified hours and/or days, and may impose other restrictions on the use of water for such irrigation. The irrigation of exterior vegetation at other than these times shall be considered to be a waste of water.	Yes
2	Landscape - Limit landscape irrigation to specific times	5-10%	Public and private parks, golf courses, swimming pools and school grounds which use water provided by Loma Linda shall use water for irrigation and pool filling between the hours of 6 P.M. and 6 A.M.	Yes
2	Landscape - Other landscape restriction or prohibition	0-5%	Persons receiving water from Loma Linda who are engaged in commercial agricultural practices, whether for the purpose of crop production or growing of ornamental plants shall provide,	Yes

SHORTAGE STAGE	DEMAND REDUCTION ACTIONS	HOW MUCH IS THIS GOING TO REDUCE THE SHORTAGE GAP?	ADDITIONAL EXPLANATION OR REFERENCE	PENALTY, CHARGE, OR OTHER ENFORCEMENT
			maintain and use irrigation equipment and practices which are the most efficient possible. Upon the request of the director of public services, these persons may be required to prepare a plan describing their irrigation practices and equipment, including but not limited to, an estimate of the efficiency of the use of water on their properties.	
2	Landscape - Other landscape restriction or prohibition	0-5%	Commercial and industrial facilities shall, upon request of the director of public services, provide Loma Linda with a plan to conserve water at their facilities. Loma Linda will provide these facilities with information regarding the average monthly water use by the facility for the last two-year period. The facility will be expected to provide Loma Linda with a plan to conserve or reduce the amount of water used by that percentage deemed by the City Council to be necessary under the circumstances. After review and approval by the director of public services, the water conservation plan shall be considered subject to inspection and enforcement by Loma Linda.	Yes
2	Landscape - Restrict or prohibit runoff from landscape irrigation	0-5%	No customer of Loma Linda or other person acting on behalf of or under the direction of a customer shall cause or permit the use of water for irrigation of landscaping or other outdoor vegetation, plantings, lawns or other growth, to exceed the amount required to provide reasonable or excessive waste of water from such irrigation activities or from watering devices or systems. The free flow of water away from an irrigated site shall be presumptively considered excessive irrigation and waste as defined.	Yes
2	Other - Prohibit use of potable water for washing hard surfaces	0-1%	No water provided by Loma Linda shall be used for the purposes of Wash down of impervious areas without specific written authorization of the director of public services. Any water used on all premises that is allowed to escape the premises and run off into gutters or storm drains shall be considered a waste of water.	Yes

SHORTAGE STAGE	DEMAND REDUCTION ACTIONS	HOW MUCH IS THIS GOING TO REDUCE THE SHORTAGE GAP?	ADDITIONAL EXPLANATION OR REFERENCE	PENALTY, CHARGE, OR OTHER ENFORCEMENT
2	Other - Require automatic shut of hoses	0-1%	The washing of cars, trucks or other vehicles is not permitted, except with a hose equipped with an automatic shut-off device, or at a commercial facility designated and so designated on Loma Linda’s billing records.	Yes
2	Pools and Spas - Require covers for pools and spas	0-1%	All residential, public and recreational swimming pools, of all sizes, shall use evaporation resistant covers and shall recirculate water. Any swimming pool which does not have a cover installed during periods of non-use shall be considered a waste of water.	Yes
3	CII - Restaurants may only serve water upon request	0-1%	Restaurants shall not serve drinking water to patrons except by request.	Yes
3	Landscape - Prohibit all landscape irrigation	10-30%	Watering of parks, school grounds, golf courses, lawn watering, and landscape irrigation is prohibited.	Yes
3	Landscape - Prohibit certain types of landscape irrigation	10-30%	Commercial nurseries shall discontinue all watering and irrigation. Watering of livestock is permitted as necessary.	Yes
3	Other - Prohibit use of potable water for construction and dust control	0-1%	No new construction meter permits shall be issued by Loma Linda. All existing construction meters shall be removed and/or locked.	Yes
3	Other - Prohibit use of potable water for washing hard surfaces	0-1%	Washing down of driveways, parking lots or other impervious surfaces is prohibited.	Yes
3	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	0-1%	Washing of vehicles, except when done by commercial car wash establishments using only recycled or reclaimed water is prohibited.	Yes
3	Water Features - Restrict water use for decorative water features, such as fountains	0-1%	Filling or adding water to wading pools, ornamental ponds, fountains and artificial lakes are prohibited.	Yes
3	Other water feature or swimming pool restriction	0-1%	Filling or adding water to swimming pools and spas is prohibited.	Yes

### 4.3 Operational Changes and Additional Mandatory Restrictions

During shortage conditions, operations may be affected by supply augmentation or demand reduction responses. Loma Linda will consider their operational procedures when it completes its Annual Assessment. Any additional mandatory restrictions implemented in response to the declaration of a shortage response stage, beyond the actions listed in [Table 3](#) and [Table 4](#), are listed in Loma Linda’s Ordinance 443 provided in [Attachment 1](#).



## 4.4 Emergency Response Plan

In 2021, Loma Linda will complete a Risk and Resilience Assessment (RRA) and Emergency Response Plan (ERP) in accordance with America's Water Infrastructure Act (AWIA) of 2018. The purpose of the RRA and ERP is to meet the AWIA compliance requirements and plan for long-term resilience of Rialto's infrastructure. The RRA will assess Loma Linda's water system to identify critical assets and processes that may be vulnerable to human and natural hazards, and to identify measures that can be taken to reduce risk and enhance resilience from service disruption for the benefit of customers. The RRA identifies and characterizes both infrastructure-specific and system-wide vulnerabilities and threats and quantifies the consequences of disruption. The RRA also identifies various options (and constraints) in addressing and mitigating risk. The RRA, in conjunction with the Emergency Response Plan (ERP), charts a course for water system resilience. The RRA also provided various recommendations to increase reliability of Loma Linda's system. Since critical pieces of infrastructure and specific vulnerabilities are detailed in the RRA and ERP, the contents of the document are confidential and for use by Loma Linda's staff only. However, Loma Linda can confirm that these plans meet the requirements set forth by AWIA and evaluate seismic risks and mitigation actions to Loma Linda's infrastructure.

In the event of a water shortage emergency resulting from equipment failure, power outage, or other catastrophe, Loma Linda is prepared to purchase emergency water supplies from nearby agencies while repairs or other remedial actions are underway. Loma Linda may also implement its three-stage plan for conservation, as described above, with either voluntary or mandatory reductions depending on the severity of the shortage. For severe disasters (Stage 3), mandatory water use reductions are specified.

## 4.5 Seismic Risk Assessment and Mitigation Plan

Disasters, such as earthquakes, can and will occur without notice. In order to prepare for seismic disasters Loma Linda has assessed the seismic risk and reliance of Loma Linda's water facilities in the RRA mentioned in the section above.

## 4.6 Shortage Response Action Effectiveness

Loma Linda has estimated the effectiveness of shortage response actions in [Table 3](#) and [Table 4](#) when data pertaining to such actions is available. It is expected that response actions effectiveness is also a result of successful communication and outreach efforts.

## 5.0 Communication Protocols

Loma Linda prioritizes effective communication, especially in times of a water shortage emergency. Loma Linda routinely communicates to customers about details on when a stage is announced. Communication actions may include bill inserts, handouts, informative flyers, direct mail pieces, newspaper and bus shelter advertisements, news releases, social media outreach, and website content. Loma Linda continues to provide reminders about shortage stages and encourages conservation at all times.

## 6.0 Compliance and Enforcement

Penalties and charges for excessive use are the heart of Ordinance 443 and the strongest incentive for conservation among the users. Service may be terminated to any customer who knowingly and willfully violates any provision of the Water Shortage Plan and Ordinance 443. In addition, civil action penalties by Loma Linda can be enacted as summarized below:

- **First Violation** – Issuance of written notice of violation of water user.
- **Second Violation** – A \$100 surcharge is imposed on the water meter.
- **Third Violation** – A \$200 surcharge and/or installation of a flow restrictor on the water meter.
- **Subsequent Violations** – Discontinuance of service.

The director of public services may grant permits for uses of water otherwise prohibited under the provisions of this chapter if they find and determine that restrictions herein would either:

- **Hardship.** Cause an unnecessary and undue hardship to the water user or the public; or
- **Emergency.** Cause an emergency condition affecting the health, sanitation, fire protection or safety of the water use or of the public. (Ord. 443 § 1, 1991)

Such exceptions may be granted only upon written application. Upon granting such an exception permit, the director of public services may impose any conditions they determine to be just and proper. (Ord. 443 § 1, 1991)

## 7.0 Legal Authorities

Loma Linda's Municipal Chapter 13.04, along with Ordinance 443, provided in [Attachment 1](#), outlines the WSCP. The Ordinance provides for exceptions under certain circumstances, establishes enforcement provisions, defines the methods for declaring and terminating water conservation stages, and provides for the form of notices and decisions of the City Council.

In accordance with CWC Section Division 1, Section 350, the City Council 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.

If a water shortage is approaching, Loma Linda shall coordinate with any of the cities and counties in its service area for the possible proclamation of a local emergency.

## 8.0 Financial Consequences of WSCP

To ensure Loma Linda customers comply with Municipal Chapter 13.04 and Ordinance 443 and CWC Chapter 3.3 (Excessive Residential Water Use During Drought), additional costs may be incurred to monitor and enforce response actions. The incurred cost may vary depending on the shortage stage and duration of the water shortage emergency.

If the various stages set forth in Loma Linda's WSCP are initiated, revenues will be impacted by reduced water sales. In order to minimize the financial impact this would have on Loma Linda, the monthly fixed revenues (monthly meter charges) need to cover the majority of the fixed costs of Loma Linda's water system during such an event. The fixed costs are incurred by Loma Linda regardless of how much or when it delivers water to the customer. These costs generally include administration, personnel, billing, testing, maintenance, meter maintenance, pipeline and facility replacements. Expenditures during periods of drought may be impacted by additional staffing or advertising costs. Expenses such as capital improvements may be deferred during this reduction in sales when feasible.

To mitigate the financial impacts of a water shortage, Loma Linda maintains excess funds in the Water Enterprise Fund (Fund). This Fund is used for all operations associated with the running of the water

system. Part of the Fund can be used to stabilize rates during periods of water shortage or disasters affecting the water supply.

Even with the additional monies in the Fund, rate increases may be necessary during a prolonged water shortage. Loma Linda may wish to increase the fixed monthly meter service charge to cover the shortfall in revenue resulting from the decrease in water sales during a water shortage. The additional revenue would help to cover any increased operating and water expenses that occur.

## 9.0 Monitoring and Reporting

During a water shortage, Loma Linda's Director of Public Services will monitor the supply and demand for water on a daily basis to determine the shortage response actions required by the implementation or termination of a WSCP stage and will notify the City Council of the necessity for the implementation or termination of a stage if a change in shortage conditions occurs. Each declaration of the City Council implementing or terminating a water conservation stage shall be published at least once in a newspaper of general circulation and shall be posted at the City's offices.

In normal water supply conditions, production figures are recorded daily. Totals are recorded daily on a continuous computerized monitoring system to the Water Department Supervisor. Totals are reported monthly to the City Administrator and incorporated into the water supply report to the Utilities Commission.

During a Stage 2 and Stage 3 water shortage, daily production figures will be reported to the Water Department Supervisor. The Water Department Supervisor compares daily production to the target daily production to verify that the reduction goal is being met. Reports are forwarded to the City Administrator on an as-needed basis, continuously if appropriate. Monthly reports are sent to the Utility Commission. If reduction goals are not met, the Administrator will notify the City Council so that additional action can be taken.

During a disaster shortage, the City Administrator will report continuously to the City Council and inform the San Bernardino County Office of Emergency Services. Special Council meetings can be convened should authorization for special actions be needed.

## 10.0 WSCP Refinement Procedures

The WSCP is best prepared and implemented as an adaptive management plan. Loma Linda will use results obtained from their monitoring and reporting program to evaluate any needs for revisions. Potential changes to the WSCP that would warrant an update include, but are not limited to, any changes to trigger conditions, changes to the shortage stage structure, and/or changes to shortage response actions.

Any prospective changes to the WSCP would need to be presented to Loma Linda's City Council for discretionary approval. Once discretionary approval has been granted, Loma Linda will hold a public hearing, obtain any comments, and adopt the updated WSCP. Notices for refinement and the public hearing date will be published in the local newspaper in advance of any public meetings.

## 11.0 Plan Adoption, Submittal and Availability

Loma Linda adopted this WSCP with the 2020 IRUWMP. The 2020 IRUWMP and WSCP were made available for public review in May/June 2021 and a public hearing was held on **June 29, 2021** to receive public input on the draft 2020 IRUWMP and the WSCP.

The Loma Linda City Council adopted the 2020 IRUWMP and the WSCP at a public meeting on **June 29, 2021**. The resolution of adoption is included as an attachment.

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

This WSCP will be available to the public on the City of Loma Linda web site.

If Loma Linda identifies the need to amend this WSCP, it will follow the same procedures for notification to cities, counties and the public as used for the 2020 IRUWMP and for initial adoption of the WSCP.

## References

- California Department of Water Resources. (2021). *Urban Water Management Plan Guidebook 2020*. Sacramento: California Department of Water Resources.
- Texas Living Waters Project. (2018). *Water Conservation by the Yard: A Statewide Analysis of Outdoor Water Savings Potential*. Austin: Texas Living Waters Project, Sierra Club, National Wildlife Federation. Retrieved from Texas Living Waters Project.
- United States Environmental Protection Agency, Office of Water. (2002). *Cases in Water Conservation: How Efficiency Programs Help Water Utilities Save Water and Avoid Costs*. United States Environmental Protection Agency.

# Attachment 1: City of Loma Linda Municipal Chapter 13.04 & Ordinance 443

## SECTION FOUR

### WATER SHORTAGE CONTINGENCY PLAN

#### Urban Water Shortage Contingency Analysis

This Contingency Analysis has been prepared in accordance with the guidelines in the California Water Code Section 10632 (a through I), established by the Department of Water Resources.

The City's municipal code Chapter 13.04 along with Ordinance 443 outline the stages of action to be implemented during a water shortage. The purpose is to provide water conservation measures in order to minimize the effect of a water shortage on the citizens of, and the economic well-being of the community. The municipal code adopts provisions that will significantly reduce the wasteful and inefficient consumption of water, thereby extending the available water resources required for the domestic, sanitation, and fire protection needs of the citizens served by the City while reducing the hardship on the City and the general public to the greatest extent possible.

The City's water production during the recent droughts has been sufficient to supply customer demands. The City has not had to implement Stages 2 or 3 of Ordinance 443. This is largely due to the City's construction of adequate water production facilities to meet adverse conditions. By continuing this philosophy, the City will be able to meet future demands, except under some extreme conditions where they may be forced, for a temporary period of time, to exercise the mandatory provisions of the City's Municipal Code.

Priorities for use of available water, based on California Water Code Chapter 3 and community input, are:

- Health & Safety** -- Interior residential and fire fighting
- Commercial & Governmental** -- Maintain jobs and economic base
- Existing Landscaping** -- Especially trees and shrubs
- New Demand** -- Projects without permits when shortage is declared

**4.1 Stages of Action**  
(California Water Code Section 10632 (a))

In Ordinance 443, the City has developed a three-stage action plan that includes voluntary and mandatory stages. The stages of action to be undertaken by the City in response to water supply shortages are described below along with an outline of specific water supply conditions which are applicable to each stage and the various restrictions and prohibitions included in the ordinance.

**Supply Shortage Triggering Levels**

The director of public services of the City shall monitor the supply and demand for water on a daily basis to determine the level of conservation required by the implementation or termination of the water conservation plan stages and shall notify the City Council of the necessity for the implementation or termination of each stage. Each declaration of the City Council implementing or terminating a water conservation stage shall be published at least once in a newspaper of general circulation, and shall be posted at the City's offices. Each declaration shall remain in effect until the City Council otherwise declares, as provided in this section. (Ord. 443 § 1 (part), 1991)

Exceptions may be granted by the director of public services if he finds and determines that the restrictions would cause hardship or cause an emergency condition.

In order to minimize the social and economic impact of water shortages, the City will manage water supplies prudently. This Plan is designed to provide a supply during a severe or extended water shortage as nearly normal as possible. The water shortage action plan triggering levels were established by the City Council to ensure that the above policy statements are implemented. These were shown in the Worst Case Water Supply Availability.

As the shortages become evident to the City Manager, he invokes the appropriate Stage, unless the City Council votes otherwise. Shortages may trigger a Stage at any time.

**STAGE 1** - Normal Conditions Voluntary conservation measures

**STAGE 2** - Threatened Water Supply Shortage - 25% Reduction in Supply

**STAGE 3** - Water Shortage Emergency

Mandatory Conservation Measures - 50% Reduction in Supply

**Table 4-1**  
**Water Supply Shortage Stages and Conditions**  
**Rationing Stages**

Stage No.	Water Supply Conditions	% Shortage
Stage 1	Normal	Normal
Stage 2	Threatened Water Supply Shortage	25% Reduction in Supply
Stage 3	Water Shortage Emergency	50% Reduction in Supply



### Stage 1 - Normal Conditions - Voluntary Conservation Measures

Normal conditions shall be in effect when the City is able to meet all the water demands of its customers in the immediate future. During normal conditions all water users should continue to use water wisely, to prevent the waste or unreasonable use of water, and to reduce water consumption to that necessary for ordinary domestic and commercial purposes. (Ord. 443 § 1 (part), 1991)

Water rules and regulations in the City of Loma Linda are stipulated by Resolution No. 2241 (Adopted July 23, 2002), shown in the Appendix, hereby repealing resolution 1987. All revenues from water services become City revenues, solely for the purpose of operating, maintaining and expanding the water system and facilities.

Salient features of the water rate Resolution No. 2241 are: (1) a bi-monthly water usage charge based on meter size and minimum consumption, also its location (either inside or outside the City limits), (2) a quantity charge which increases substantially for larger blocks of usage. In general, the City of Loma Linda's rate schedule per Resolution No. 2241 is comprehensive, conservation structured and reflects the policy of direct payment per services rendered.

Resolution No. 2241 - Rate Schedule (Effective August 1, 2002)  
Bi-Monthly Rates per CCF (Hundred Cubic Feet = 748 Gallons)

**Table 4-2**  
**Minimum Bi-Monthly Charge by Meter Sizes**

Meter Size	Inside The City	Outside The City
5/8" x 3/4"	\$18.40	\$21.26
1"	\$33.67	\$38.73
1 1/2"	\$69.32	\$79.72
2"	\$161.41	\$185.62
3"	\$330.87	\$375.21
4"	\$502.42	\$654.28
6"	\$678.56	\$780.34
8"	\$766.62	\$881.61
10"	\$854.71	\$982.92

**Table 4-3  
Water Rate Schedule**

Water Usage	Inside The City	Outside The City
From 0 to 1,000 cu. ft.	\$ .873	\$ 1.004
From 1,001 to 40,000 cu. ft.	1.163	1.337
From 40,001 to 80,000 cu. ft.	1.279	1.471
80,001 cu. ft. and over	1.397	1.607

**Stage 2 - Threatened Water Supply Shortage**

In the event of a threatened water supply shortage which could affect the City's ability to provide water for ordinary domestic and commercial uses, the City Council shall hold a public hearing at which consumers of the water supply shall have the opportunity to protest and to present their respective needs to the City. The City Council may then, by resolution, declare a water shortage condition to prevail, and the following conservation measures shall be in effect.

**Exterior Landscape Plans** - Landscape plans for all new commercial and industrial developments shall provide for timed irrigation and shall consider the use of drought resistant plants. Such plans shall be presented and approved by the City prior to issuance of a water service letter.

**Excessive Irrigation and Related Waste** - No customer of the City or other person acting on behalf of or under the direction of a customer shall cause or permit the use of water for irrigation of landscaping or other outdoor vegetation, plantings, lawns or other growth, to exceed the amount required to provide reasonable or excessive waste of water from such irrigation activities or from watering devices or systems. The free flow of water away from an irrigated site shall be presumptively considered excessive irrigation and waste as defined.

**Agricultural Irrigation** - Persons receiving water from the City who are engaged in commercial agricultural practices, whether for the purpose of crop production or growing of ornamental plants shall provide, maintain and use irrigation equipment and practices which are the most efficient possible. Upon the request of the director of public services, these persons may be required to prepare a plan describing their irrigation practices and equipment, including but not limited to, an estimate of the efficiency of the use of water on their properties.

**Commercial Facilities** - Commercial and industrial facilities shall, upon request of the director of public services, provide the City with a plan to conserve water at their facilities. The City will provide these facilities with information regarding the average monthly water use by the facility for the last two-year period. The facility will be expected to provide the City with a plan to conserve or reduce the amount of water used by that percentage deemed by the City Council to be necessary under the circumstances. After review and approval by the director of public services, the water conservation plan shall be considered subject to inspection and enforcement by the City.

**Parks, Golf Courses, Swimming Pools and School Grounds** - Public and private parks, golf courses, swimming pools and school grounds which use water provided by the City shall use water for irrigation and pool filling between the hours of six p.m. and six a.m.

**Domestic Irrigation** - Upon notice and public hearing, the City may determine that the irrigation of exterior vegetation shall be conducted only during specified hours and/or days, and may impose other restrictions on the use of water for such irrigation. The irrigation of exterior vegetation at other than these times shall be considered to be a waste of water.

**Swimming Pool** - All residential, public and recreational swimming pools, of all sizes, shall use evaporation resistant covers and shall re-circulate water. Any swimming pool which does not have a cover installed during periods of non-use shall be considered a waste of water.

**Runoff and Wash down** - No water provided by the City shall be used for the purposes of Wash down of impervious areas without specific written authorization of the director of public services. Any water used on a premises that is allowed to escape the premises and run off into gutters or storm drains shall be considered a waste of water.

**Vehicle Washing** - The washing of cars, trucks or other vehicles is not permitted, except with a hose equipped with an automatic shut-off device, or at a commercial facility designated and so designated on the City's billing records.

**Drinking Water Provided by Restaurants** - Restaurants are requested not to provide drinking water to patrons except by request. (Ord. 443 § 1 (part), 1991)

### **Stage 3 - Water Shortage Emergency - Mandatory Conservation Measures**

In the event of a water shortage emergency in which the City may be prevented from meeting the water demands of its customers, the City Council shall, if possible given the time and circumstances, immediately hold a public hearing at which customers of the City shall have the opportunity to protest and to present their respective needs to the City Council. No public hearing shall be required in the event of a breakage or failure of a pump, pipeline, or conduit causing an immediate emergency. The director of public services is empowered to declare a water shortage emergency, subject to the ratification of the City Council within seventy-two hours of such declaration, and the following rules and regulations shall be in effect immediately following such declarations:

**Prohibition** - Watering of parks, school grounds, golf courses, lawn watering, landscape irrigation, Wash down of driveways, parking lots or other impervious surfaces, washing of vehicles, except when done by commercial car wash establishments using only recycled or reclaimed water, filling or adding water to swimming pools, wading pools, spas, ornamental ponds, fountains and artificial lakes are prohibited.

**Restaurants** - Restaurants shall not serve drinking water to patrons except by request.

**Construction Meters** - No new construction meter permits shall be issued by the City. All existing construction meters shall be removed and/or locked.

**Commercial Nurseries and Livestock** - Commercial nurseries shall discontinue all watering and irrigation. Watering of livestock is permitted as necessary. (Ord. 443 § 1 (part), 1991)

**4.2 Estimate of Minimum Supply for Next Three Years**  
 (California Water Code Section 10632 (b))

The City receives water supplies from City owned and operated groundwater wells which derives its water from the Bunker Hill ground water basin. The location of Loma Linda's existing and projected source wells are all within the portion of the Bunker Hill Basin which is the last part of the basin that would experience water loss. The Basin contains over 5,000,000 acre feet of water and has sufficient supply for many consecutive drought years without any natural recharge. Ground water pumping within this basin has been partially controlled by a court judgement, which determined that the safe yield for the Bunker Hill Basin to be 232,100 acre-feet per year. It is believed that this control on pumping, combined with State Project Water deliveries and annual rainfall is sufficient to replenish the basin storage level for all potential future demands.

During recent droughts, water levels in neighboring basins have declined over 300 feet while levels in the City's area of the Bunker Hill Basin only dropped 60 feet, for the same time period. Due to the relative stability of the groundwater level in the lower portion of the Bunker Hill Basin, other local water purveyors are shifting their main source of supply to the Bunker Hill Basin to offset production levels in times of drought.

The following table provides an estimate of the worst case water supply available from the City's wells for the next three years. The supply is based on 16 hours per day of pumping and 240 days. Should the City required additional supply they have the option of pumping more hours or more days.

**Table 4-4**  
**Worst Case Water Supply Availability**  
**Three-Year Estimated Minimum Water Supply (AF/Yr)**

Source	Normal Supply Year (1996)	Year 1 (2006)	Year 2 (2007)	Year 3 (2008)
Bunker Hill Groundwater Wells	4,953	7,466	7,602	9,723

The normal supply year of 1996 shown above is based on the actual production figures for that year. The available supply for years 1, 2 and 3 includes the production from existing City wells in addition to the planned supply projects that will commence during this time frame. As can be seen from Table 4-4 the worst case water supply will be sufficient to meet the projected demands for the City's service area.

#### **4.3 Catastrophic Supply Interruption Plan** (California Water Code Section 10632 (c))

Extended multi-week supply shortages due to natural disasters or accidents which damage all water sources are unlikely, but would be severe if more than one of the City's wells were out of service. The City's storage reservoirs hold 14.9 million gallons, which is sufficient treated water to meet the health and safety requirements (50) gpc for 23,000 people for 12 days. This assumes zero non-residential use.

In the event of a power shortage, the City has two portable backup generators at their disposal that they can utilize to provide supply from one well and boosting within the distribution system.

The City also has interconnections with two local water purveyors for emergency supplies. Those are the City of San Bernardino and the City of Redlands. The City also has an interconnect with the Loma Linda University water system as an emergency connection. There is no formal agreement for the exchange of water between the City and the University; however, the connection is metered to monitor any exchange of water between the two entities.

#### **4.4 Prohibitions, Penalties, and Consumption Reduction Methods** (California Water Code 10632 (d-f))

Consumption limits in the progressively restrictive stages are imposed on different uses. These are based on percentage reductions in water allotments, and restrictions on specific uses. The individual customer allotments will be based on the previous year's use. This gives the City a basis for reviewing appeals. The specific percentage reductions at each stage are listed in Table 4-1. The City has established block rate schedules for each stage of drought to encourage compliance with the restrictions.

##### **Mandatory Prohibitions on Water Use**

Mandatory provisions to reduce water use during the different Stages are summarized earlier in this chapter. Provisions of Ordinance No.443, Section 16 Water Conservation, prohibit the watering of parks, school grounds, golf courses, lawn watering, landscape irrigation, wash-down of driveways, parking lots or other impervious surfaces, washing of vehicles, except when done by commercial car wash establishments using only recycled or reclaimed water, filling or adding water to swimming pools, wading pools, spas, ornamental ponds, fountains and artificial lakes.

##### **Penalties & Charges for Excessive Use**

Penalties and charges for excessive use are the heart of Ordinance 443 and the strongest incentive for conservation among the users. The City of Loma Linda's current rate structure as summarized in Table-4-3, Water Rate Schedule, as adopted July 23, 2002 per Resolution No. 2241 is included in the Appendix.

The Water Department Manager has classified each customer. Each customer is made aware of their classification. New customers and connections will be notified at the time service commences. In a disaster, prior notice of allotment may not be possible; notice will be provided by other means. Any customer may appeal the Water Department Supervisor's classification on the basis of use or the percentage on the basis of incorrect calculation. Appeals shall be processed as set forth in Ordinance 443.

Service may be terminated to any customer who knowingly and willfully violates any provision of the Water Shortage Plan and Ordinance 443.

**First Violation** - The first time a customer exceeds the required percentage reduction, a written warning is sent to the customer and/or property owner personally or by regular mail.

**Second Violation** - For a second violation of this ordinance within a 12-month period or failure to comply with the notice of violation within the period stated, a surcharge of \$100 is imposed for the meter through which the wasted water was supplied.

**Third Violation** - For a third violation within a 12-month period, or for continued failure to comply within 30 days after notice of an imposition of second violation sanctions, a one month penalty surcharge in the amount of \$200 is imposed. In addition to the surcharge, the City may, at its discretion, install a flow-restricting device at the meter. The charge to the customer for installing a flow-restricting device is based on the size of meter and the actual cost of installation but shall not be less than that provided in the City's rules and regulations. The charge for removal of the flow restricting device and restoration of normal service shall be as provided in the City's rules and regulations.

**Subsequent Violations** -For any subsequent violation of this ordinance within the twenty-four (24) calendar months after a first violation, the penalty surcharge provided shall be imposed and the City may discontinue water service to that customer at the premises or to the meter where the violation occurred. The charge for re-connection and restoration of normal service shall be as provided in the rules and regulations of the City. Such restoration of service shall not be made until the director of public services of the City has determined that the water user has provided reasonable assurances that future violations by such user will not occur.

#### 4.5 Analysis of Revenue Impacts on Reduced Sales During Shortages (California Water Code Section 10632 (g))

Revenues will be impacted when, reduced water sales during the various stages as set forth in the City's Water Shortage Contingency Plan, are initiated. In order to minimize the financial impact this would have on the City, the monthly fixed revenues (monthly meter charges) need to cover the majority of the fixed costs of the City's water system during such an event.

The fixed costs are incurred by the City regardless of how much or when it delivers water to the customer. These costs generally include administration, personnel, billing, testing, maintenance, meter maintenance, pipeline and facility replacements.

Expenditures during periods of drought may be impacted by additional staffing or advertising costs. Expenses such as capital improvements should be deferred during this reduction in sales when feasible. The City, which produces all of the water consumed by its customers, will not have the added cost of a more expensive purchased water source.

In order to mitigate the financial impacts of a water shortage, the City maintains excess funds in the Water Enterprise Fund (Fund). This Fund is used for all operations associated with the running of the water system. Part of the Fund can be used to stabilize rates during periods of water shortage or disasters affecting the water supply. The City has a current balance of \$2.1 million dollars in the Fund.

Even with the additional monies in the Fund, rate increases may be necessary during a prolonged water shortage. The City may wish to increase the fixed monthly meter service charge to cover the shortfall in revenue resulting from the decrease in water sales during a water shortage. The additional revenues would also help to cover any increased operating and water expenses that occur.

The experiences of California water purveyors during the 1990-91 drought shortage demonstrated that actual water use reductions by customers are usually larger than those requested by the supplier. During the 1990-91 drought shortage it was also politically difficult for many agencies to adopt the rate increases necessitated by a 20 to 50 percent reduction in sales.

After an extended water shortage, water revenues are expected to fall below pre-shortage levels. The water use is projected at 90% of the pre-shortage use, which could result in a reduction of revenue during the twelve month period after the end of a water supply shortage.

As described in Table 4-1, a water supply shortage calls for a reduction in water consumption, mandatory conservation measures and prohibited water uses. When a water shortage emergency is declared, the supply shortage will trigger the appropriate rationing stage and appropriate charges and penalties.

The City is currently undergoing a rate review. The review will analyze the existing rate structure, and formulate changes that would allow the City to meet their fixed annual expenditures with fixed revenue. The monthly meter charge is a fixed revenue that the City will receive regardless of the amount of water consumed. An increase in fixed revenue will help to offset any loss of revenue seen during a reduction in consumption due to the implementation of any of the stages of action outlined in Ordinance 443.



**4.6 Draft Ordinance and Use Monitoring Procedure**  
(California Water Code Section 10632 (h-I))

**Implementation of the Plan** - In the event of a threatened water supply shortage which could affect the City's ability to provide water for ordinary domestic and commercial uses, the City Council shall hold a public hearing at which consumers of the water supply shall have the opportunity to protest and to present their respective needs to the City. The City Council may then, by resolution, declare a water shortage condition to prevail.

**Water Use Monitoring Procedures** - The director of public services of the City shall monitor the supply and demand for water on a daily basis to determine the level of conservation required by the implementation or termination of the water conservation plan stages and shall notify the City Council of the necessity for the implementation or termination of each stage. Each declaration of the City Council implementing or terminating a water conservation stage shall be published at least once in a newspaper of general circulation, and shall be posted at the City's offices. Each declaration shall remain in effect until the City Council otherwise declares, as provided in this section.

**Stage 1 - Normal Condition - Monitoring Procedure**

In normal water supply conditions, production figures are recorded daily. Totals are reported daily on a continuous computerized monitoring system to the Water Department Supervisor. Totals are reported monthly to the City Administrator and incorporated into the water supply report to the Utilities Commission.

**Stage 2 - Threatened Water Supply Shortage - Monitoring Procedure**

During a Stage 2 water shortage, daily production figures are reported to the Supervisor. The Supervisor compares the daily production to the target daily production to verify that the reduction goal is being met. Reports are forwarded to the City Administrator on an as-needed basis, continuously if appropriate. Monthly reports are sent to the Utility Commission. If reduction goals are not met, the Administrator will notify the City Council so that corrective action can be taken.

**Stage 3 - Water Shortage Emergency - Monitoring Procedure**

During a Stage 3 water shortage, the procedure listed above will be followed.

**Disaster Shortage**

During a disaster shortage, the City Administrator will report continuously to the City Council and inform the San Bernardino County Office of Emergency Services. Special Council meetings can be convened should authorization for special action be needed.

A coordinated response to water supply shortages is necessary for uniformity in developing, implementing and enforcing Drought Contingency Plans. The City's primary source of water is groundwater wells within the Bunker Hill Basin. SBVMWD's primary function is to plan and develop a long-range water supply for water agencies within this Basin.

## Chapter 13.04 WATER DEPARTMENT

---

### Note

---

\* Prior ordinance history: Ords. 1, 294, 286 and 333.

#### 13.04.010 Short title.

---

This chapter shall be known and may be cited as the “utility services division (water) of the community services department” of the city. (Ord. 443 § 1, 1991)

#### 13.04.020 Definitions.

---

As used in this chapter:

- A. Words and Phrases. For the purpose of this chapter, all words used in the present tense shall include the future; all words in the plural number shall include the singular number; and all words in the singular number shall include the plural number.
- B. “City council” means the city council of the city of Loma Linda, California. All decisions of the city manager and city staff may be appealed to the city council pursuant to Section 2.08.030.
- C. “City staff” means the employees and contract representatives of the city who are appointed to administer and operate the water system of the city.
- D. “Connection” means the pipe line and appurtenant facilities such as the curb stop, meter and meter box, all used to extend water service from the main to premises, the laying thereof and the tapping of the main. Where services are divided at the curb or property line to serve several customers, each such branch service shall be deemed a separate service.
- E. “Cost” means the cost of labor, material, transportation, supervision, engineering, and all other necessary overhead expense.
- F. “Cross-connection” means any physical connection between the piping system from the division’s service and that of any other water supply that is not, or cannot be, approved as safe and potable for human consumption, whereby water from the unapproved source may be forced or drawn into the utility services division (water) distribution mains.
- G. “Main” means a water pipe line in a street, highway, alley, or easement used for public and private fire protection and for general distribution of water.
- H. “Owner” means the person owning the fee, or the person in whose name the legal title to the property appears, by deed duly recorded in the county recorder’s office, or the person in possession of the property or buildings under claim of, or exercising acts of ownership over same for himself, or as executor, administrator, guardian or trustee of the owner.
- I. “Person” means an individual or a company, association, copartnership or public or private corporation.
- J. “Premises” means a lot or parcel of real property under one ownership, except where there are well-defined boundaries or partitions such as fences, hedges, or other restrictions preventing the common use of the

property by the several tenants, in which case each portion shall be deemed separate premises. Apartment houses and office buildings may be classified as single premises.

K. “Private fire protection service” means water service and facilities for building sprinkler systems, hydrants, hose reels and other facilities installed on private property for fire protection and the water available therefor.

L. “Public fire protection service” means the service and facilities of the entire water supply, storage and distribution system of the division, including the fire hydrants affixed thereto, and the water available for fire protection, excepting house service connections and appurtenances thereto.

M. “Regular water service” means water service and facilities rendered for normal domestic, commercial and industrial purposes on a permanent basis, and the water available therefor.

N. “Temporary water service” means water service and facilities rendered for construction work and other uses of limited duration, and the water available therefor.

O. “Utility services division (water)” means division operated under the jurisdiction of the city council represented by appropriate employees or agents. (Ord. 443 § 1, 1991)

#### **13.04.030 Notice—To customers.**

---

Notices to customers by the division will normally be given in writing and either delivered or mailed to him at his last known address. Where conditions warrant, and in emergencies, the utility services division (water) may resort to notification either by telephone or messenger. (Ord. 443 § 1, 1991)

#### **13.04.040 Notice—From customers.**

---

Notices from customers to the utility services division (water) may be given by the customer or his authorized representative in writing, in person or by mail at the division’s office. (Ord. 443 § 1, 1991)

#### **13.04.050 Authority of public services director.**

---

The public services director shall have full charge and control of the maintenance, operation and construction of the water works and water distribution system of the district. The public services director shall regularly inspect all physical facilities related to the city water system, to see that they are in good repair and proper working order, and to note and report violations of any ordinances or water regulations. (Ord. 443 § 1, 1991)

#### **13.04.060 Supervisory employees designated.**

---

The supervisory employees of the utility services division (water) shall consist of public services director and a utility services superintendent. (Ord. 443 § 1, 1991)

#### **13.04.070 Administrative powers and duties.**

---

Regular inspection of all physical facilities belonging and related to the city water system to ensure they are in good repair and proper working order and to note violations of any water regulations. The public services director or his designee shall have charge of other employees working under his direct supervision, particularly relating to the repair and maintenance of the water system and the reading of customer meters. He shall report and be responsible to the city manager in all matters pertaining to the operation of the utility

services division (water). In the event of an emergency requiring immediate action, he shall take whatever steps are necessary to maintain customer service pending further action by the city manager, if any. Supervision of all repair or construction work authorized by the city council and any other duties prescribed elsewhere in this chapter or which shall, after the effective date of the ordinance codified in this chapter, be prescribed by the rules and regulations of the city council are the responsibility of the public services director or his designee. (Ord. 443 § 1, 1991)

---

#### **13.04.080 Delegation of utility services.**

In the absence of the public services director, the duties set forth may be performed by another employee who may be designated by the public services director to perform such duties. (Ord. 443 § 1, 1991)

---

#### **13.04.090 Department to furnish system.**

The city will furnish a system, plant, and works used for and useful in obtaining, conserving and disposing of water for public and private uses, including all appurtenances to it, and lands, easements, rights in land, water rights, contract rights, franchises, and other water supply, storage and distribution facilities and equipment, including but not limited to private and public developed projects both on-site and off-site. (Ord. 443 § 1, 1991)

---

#### **13.04.100 Acceptance of conditions required.**

All applicants for service connections or water service shall be required to accept such conditions of pressure and services as are provided by the distributing system at the location of the proposed service connection, and to hold the city harmless for any damages arising out of low pressure or high pressure conditions or interruptions in service. (Ord. 443 § 1, 1991)

---

#### **13.04.110 Department not responsible for pressure.**

The city shall not accept any responsibility for the maintenance of pressure, and it reserves the right to discontinue service while making emergency repairs, etc. Consumers dependent upon a continuous supply of water should provide their own emergency storage. (Ord. 443 § 1, 1991)

---

#### **13.04.120 Valve operation restricted to department.**

No one except an employee or representative of the utility services division (water) shall at any time in any manner operate the curb cocks or valves, except for repair on private property or to avoid property damage, main cocks, gates or valves of the city's water system or interfere with meters or their connections, street mains or other parts of the water system. (Ord. 443 § 1, 1991)

---

#### **13.04.130 Service discontinuance authorized for noncompliance.**

For the failure of the customer or his agent to comply with all or any part of this chapter and any ordinance, resolution, or order fixing rates and charges of the city's utility service division (water), the customer's service shall be discontinued, and water shall not be supplied such customer until he shall have complied with the rule or regulation which he has violated or paid the rates or charges made against him for services rendered. This section shall be in addition to any other remedies authorized by law. (Ord. 443 § 1, 1991)

#### **13.04.140 Division right to determine connection size and location.**

---

The utility services division (water) reserves the right to determine the size of service connections and their location with respect to the boundaries of the premises to be served. The laying of consumer's pipe line to the curb should not be done until the location of the service connection has been approved by the utility services division (water) superintendent. (Ord. 443 § 1, 1991)

#### **13.04.150 Curb cock or valve required.**

---

Every service connection installed by the utility services division (water) shall be equipped with a curb cock or ball valve on the inlet side of the meter. Such valve or curb cock is intended for the exclusive use of the utility services division (water) in controlling the water supply through the service connection pipe. If the curb cock or valve is damaged by the consumer's use to an extent requiring replacement, such replacement shall be at the consumer's expense. (Ord. 443 § 1, 1991)

#### **13.04.160 Service connection regulations.**

---

Domestic, commercial and industrial service connections shall conform with the following rules and any deviation therefrom shall be deemed unlawful:

A. **Separate Building.** Each house or building under separate ownership must be provided with a separate service connection. Two or more houses under one ownership and on the same lot or parcel of land may be supplied through the same service connection; provided, that for each house under a separate roof which shall face a street, an additional minimum water charge will be applied to the single meter serving the house or a separate service connection may be provided for each building. The city reserves the right to limit the number of houses or the area of land under one ownership to be supplied by one service connection.

B. **Single Connection.** Not more than one service connection for domestic or commercial water supply shall be installed for one building, except under special conditions approved by the public services director.

C. **Different Owners.** A service connection shall not be used to supply adjoining property of a different owner or to supply property of the same owner across a street or an alley.

D. **Divided Property.** When property provided with a service connection is divided, each service connection shall be considered as belonging to the lot or parcel of land which it directly enters.

E. **Service Connections.** The service connections extending from the water main to the property line and including the meter, meter box and curb cock or ball valve, shall be maintained by the utility services division (water). All pipes and fixtures extending or lying beyond the meter or seven feet from main whichever is closer shall be installed and maintained by the owner of the property. (Ord. 443 § 1, 1991)

#### **13.04.170 Main extension—Regulations.**

---

The following rules are established for making main extensions:

A. Any owner of one or more lots or parcels, or a subdivider of a tract of land, desiring the extension of one or more water mains, to serve such property, shall make a written application therefor to the utility services division (water), such application to contain the legal description of the property to be served and tract number thereof, and any additional information which may be required by the city, and be accompanied by a map showing the location of the proposed connections.

B. Upon receipt of the application, the utility services division (water) shall make an investigation and survey of the proposed extension and shall report the findings to the city council, including the estimated cost of any extensions involving the utility services division (water).

C. The city council shall thereupon consider the application and report of the utility services division (water) and after such consideration reject or approve the same.

D. All extensions of mains, fire hydrants, laterals and connections provided for in accordance with this chapter and approved by the city council shall by agreement become and remain the property of the city. When a contractor or subdivider installs water mains, fire hydrants, laterals and connections in any subdivisions at his own expense, but under the supervision of the utility services division (water), such installations, upon completion and before water service is provided shall be transferred to the ownership of the city by appropriate grant deed and bill of sale.

E. No dead-end lines shall be permitted, except with the approval of the utility services superintendent, and in cases where circulation lines are necessary they shall be designed and approved by the utility services division (water) in advance of installation before becoming a part of the city system.

F. The city will provide all main pipe line extensions in existing streets to properties along dedicated roads and streets upon application for water service and if in their opinion such water service is economically feasible and to the advantage of the city system in serving the requirements of the area. The cost of such extension of water mains shall be at the expense of the applicant or group of applicants to be shared by them. If an applicant could be served adequately by a certain size pipe line to provide for future expansion of water services in the area, the city may agree to share the cost of the pipe lines on terms agreeable to both parties concerned. In the event that a larger pipe line is installed at partial cost to the city, the city may require future water users in the area who apply for new connections to reimburse the utility services division (water) for such main line extension cost until the full amount of the cost has been recovered.

G. If the property owners or subdividers initiating the pipe line extension are required to defray the entire cost of any main line extension under these regulations, and they wish to put up the entire cost of the project, the city may agree to reimburse such property owners or subdividers over a period of years by requiring all new connections in that area to pay a proportionate amount of the cost to the city, which money shall then be paid to the original investors until the full amount has been paid. (Ord. 443 § 1, 1991)

#### **13.04.180 Independent pipe line systems required when.**

---

The applicant may apply for as many services as may be reasonably required for his premises provided that the pipe line system for each service be independent of the others and that they not be interconnected. (Ord. 443 § 1, 1991)

#### **13.04.190 Wasting water prohibited—Service discontinuance authorized when.**

---

No customer shall knowingly permit leaks or waste water. Where water is wastefully or negligently used on a customer's premises, seriously affecting the general service, the utility services division (water) may discontinue the service if such conditions are not corrected within five days after giving the customer written notice. (Ord. 443 § 1, 1991)

#### **13.04.200 Facilities department property—Obstruction removal authorized.**

---

All facilities installed by the city on private property for the purpose of rendering water service shall remain the property of the city and may be maintained, repaired or replaced by the utility services division (water) without the consent or interference of the owner or occupant of the property. The owner shall use

reasonable care in the protection of the facilities. No payment shall be made for placing or maintaining the facilities on private property. Shrubbery or plants must not be planted adjacent to fire hydrants or water meters. If property owners do not cooperate in this, the city shall have the right to remove such obstructions at the expense of the property owner after giving notice of such intention. (Ord. 443 § 1, 1991)

---

#### **13.04.210 Customer liability for facilities damage.**

The customer shall be liable for any damage to the service facilities when such damage is from causes originating on the premises by an act of the customer or his tenants, agents, employees, contractors, licensees, or permittees, including the breaking or destruction of locks by the customer or others on or near a meter, and any damage to a meter that may result from hot water or steam from a boiler or heater on the customer's premises. The city shall be reimbursed by the customer for any such damage promptly on presentation of a bill for same. (Ord. 443 § 1, 1991)

---

#### **13.04.220 Attaching ground wires prohibited.**

All individuals or business organizations are forbidden to attach any ground wire or wires to any plumbing which is or may be connected to a service connection or main belonging to the city. The city shall hold the customer liable for any damage to its property occasioned by such ground wire attachments. (Ord. 443 § 1, 1991)

---

#### **13.04.230 Customer required to provide valve.**

The customer shall provide a valve on his side of the service installation, as close to the meter location as practicable, to control the flow of water to the pipe lines on his premises. The customer shall not use the service curb valve to turn meter on and off for his convenience. (Ord. 443 § 1, 1991)

---

#### **13.04.240 Department right-of-entry.**

Representatives from the utility services division (water) shall have the right of ingress and egress to the customer's premises at reasonable hours for any purpose reasonably connected with the furnishing of water service. (Ord. 443 § 1, 1991)

---

#### **13.04.250 Unauthorized connection to avoid charges.**

A customer, subdivider or their employees or agents shall not make illegal and unauthorized connections to the water system with or without a meter, thus avoiding the record of payment of water charges. (Ord. 443 § 1, 1991)

---

#### **13.04.260 Meters—Installation—Sealing.**

Meters will be installed on or near property lines and shall be owned by the city and installed and removed at its expense. No rent or other remuneration will be paid by the city for a meter or other facilities including connections belonging to individuals. All meters will be sealed by the utility services division (water) at the time of installation, and no seal shall be altered or broken except by one of the utility services division (water) authorized employees or agents. (Ord. 443 § 1, 1991)

#### **13.04.270 Meters—Relocation charges.**

---

Meters moved for the convenience of the customer will be relocated at the customer's expense. Meters moved to protect the city's property will be moved at its expense. If the lateral distance which the customer desires to have the meter moved exceeds eight feet, he will be required to pay for new service at the desired location. (Ord. 443 § 1, 1991)

#### **13.04.280 Service discontinuance authorized for cross-connection.**

---

Water service may be refused or discontinued to any premises where there exists a cross-connection in violation of state or federal laws. (Ord. 443 § 1, 1991)

#### **13.04.290 Service discontinuance—Fraud or abuse.**

---

Service may be discontinued if necessary to protect the city against fraud or abuse. (Ord. 443 § 1, 1991)

#### **13.04.300 Service discontinuance—Noncompliance.**

---

Service may be discontinued for noncompliance with this chapter or any other ordinance or regulation relating to the water service. (Ord. 443 § 1, 1991)

#### **13.04.310 Water service application—Form.**

---

A property owner or his agent may make application for regular water service on a form provided by the utility services division (water). Such application shall signify the customer's willingness and intention to comply with this chapter and other ordinances or regulation relating to the regular water service and to make payment for the water service received. (Ord. 443 § 1, 1991)

#### **13.04.320 Water service application—Payment of past service required.**

---

An application for water service will not be honored unless payment in full has been made for water service previously rendered to the applicant within the boundaries of the division. (Ord. 443 § 1, 1991)

#### **13.04.330 Connection charges—Installation by authorized personnel.**

---

A. Where a regular charge has been fixed for the type of service connection desired, such regular charges shall be paid in advance by the applicant. Where there is no regular fixed charge, the city reserves the right to require the applicant to deposit an amount equal to the estimated cost of such service connection. The current schedule of regular service connection charges is in resolution form.

B. Only duly authorized employees or agents of the utility services division (water) will be authorized to install service connections. (Ord. 443 § 1, 1991)

#### **13.04.340 Service installation—Main abutment required.**

---

Regular water services will be installed at the location desired by the applicant, of the size determined by the utility services division (water). Service installation will be made only to property abutting on distribution mains as have been constructed in public streets, alleys or easements, or to extensions thereof as provided in



this chapter. Service installed in new subdivisions prior to the construction of streets or in advance of street improvements must be accepted by the applicant in the installed location. (Ord. 443 § 1, 1991)

---

#### **13.04.350 Service requirements changes—Notice required.**

---

Customers making any material change in the size, character or extent of the equipment or operations utilizing water services, or whose change in operations results in a large increase in the consumption of water, shall immediately give the utility services division (water) written notice of the nature of the change and, if necessary, amend or change their original application. (Ord. 443 § 1, 1991)

---

#### **13.04.360 Subdivision system application—Required.**

---

A person or persons desiring to provide a water system within a tract of land which he proposes to subdivide, shall make written application therefor. (Ord. 443 § 1, 1991)

---

#### **13.04.370 Subdivision system application—Contents.**

---

The application shall state the number of the tract, the name of the subdivision, and its location. It shall be accompanied by a copy of the final map and of the plans, profiles and specifications for the street work therein. (Ord. 443 § 1, 1991)

---

#### **13.04.380 Subdivision system—Compliance required.**

---

If approved by the city council, it shall be required that the subdivider shall meet all specifications set forth by the American Water Works Association and city standards and specifications as to adequate size, type and quality of materials used and the location of main lines, valves, connections, fire hydrants, etc., and comply with all requirements of the State Health Department and the department of public safety (fire division). (Ord. 443 § 1, 1991)

---

#### **13.04.390 Subdivision system—Subdivider responsibility—Division inspection.**

---

The utility services division (water) will not undertake on its own initiative to provide or construct any main extension pipe lines in a subdivision or for the extension of main lines from existing pipe lines to the subdivision area. Such subdivision main lines and service required, together with any extension of existing pipe lines to such area, shall be the responsibility of and at the expense of the subdivider. He shall provide and arrange for the construction of all main lines, valves, connections and hydrants with laterals to the inside of curb. Upon completion of the construction project, the system shall be inspected by utility services and if approved, the subdivider shall be required to obtain final approval of the city engineer. Upon such approval, the subdivider shall be required to transfer his ownership in the mains, valves, fire hydrants, laterals, connections, etc., to the city before any regular water service shall be supplied to the subdivided tract or area. (Ord. 443 § 1, 1991)

---

#### **13.04.400 Subdivision system—Division payment for larger main installation.**

---

If the city council shall require a subdivider or other person to install a larger size main pipe line than that which would normally be required or necessary to serve the interests of the subdivider or others, by consent and written agreement between the subdivider or others and the city council, the utility services division (water) may agree to pay for the difference in cost between the small size main pipe line and the large one

which is deemed necessary and desirable for future expansion of the system. All final agreements must be approved and ratified by the city council. (Ord. 443 § 1, 1991)

---

**13.04.410 Department right to set meter—Consumer liability for negligence.**

---

The utility services division (water) reserves the right to set and maintain a meter on any service connection. The water consumer shall be held liable, however, for any damage to the meter due to customer's negligence or carelessness and in particular, for damage caused by hot water or steam from the premises. (Ord. 443 § 1, 1991)

---

**13.04.420 Guarantee deposit required when.**

---

All water customers who are renters, subdividers or builders subject to frequent change of customers shall be required to make a guarantee deposit set by resolution per connection returnable or applicable to the last or closing bill. (Ord. 443 § 1, 1991)

---

**13.04.430 Temporary service—Connection discontinuance.**

---

Temporary service connections shall be discontinued and terminated within six months after installation unless an extension of time is granted in writing by the utility services division (water). (Ord. 443 § 1, 1991)

---

**13.04.440 Temporary service—Cost deposit required—Connection charges.**

---

The applicant shall deposit, in advance, the estimated cost of installing and removing the facilities required to furnish the service exclusive of the cost of salvageable material. Upon discontinuance of service, the actual cost shall be determined and an adjustment made as an additional charge, refund or credit. If service is supplied through a fire hydrant, the applicant will be charged as per resolution. (Ord. 443 § 1, 1991)

---

**13.04.450 Temporary service—Facilities operation.**

---

All facilities for temporary service to the customer connection shall be made by the utility services division (water) and shall be operated in accordance with its instructions. (Ord. 443 § 1, 1991)

---

**13.04.460 Temporary service—Meter responsibility.**

---

The customer shall use all possible care to prevent damage to the meter or to any other loaned facilities of the utility services division (water) which are involved in furnishing the temporary service from the time they are installed until they are removed, or until forty-eight hours' notice in writing has been given to the utility services division (water) that the contractor or other person is through with the meter or meters and the installation. If the meter or other facilities are lost or damaged, the cost of the meter or cost of making repairs shall be paid by the customer. (Ord. 443 § 1, 1991)

---

**13.04.470 Temporary service—Hydrant use regulations.**

---

An applicant for temporary use of water from a fire hydrant must secure a permit therefor from the utility services division (water) and pay the regular fee charged for the installation and removal of a meter to be installed on the hydrant, provide himself with a hydrant wrench necessary to operate such hydrant, and pay for

the water used in accordance with the meter readings, at the rates prescribed by resolution. (Ord. 443 § 1, 1991)

---

**13.04.480 Tampering with hydrant prohibited.**

Tampering with any fire hydrant for the unauthorized use of water therefrom, or for any other purpose, is punishable by law. (Ord. 443 § 1, 1991)

---

**13.04.490 Temporary service—Advance payment or credit references required.**

The applicant shall pay the estimated cost of water service in advance or shall be otherwise required to establish acceptable credit references. (Ord. 443 § 1, 1991)

---

**13.04.500 Arrangements for large quantities of water required.**

When an abnormally large quantity of water is desired for filling a swimming pool or for other purposes, arrangements must be made with the utility services division (water) prior to taking such water. Permission to take water in unusual quantities will be given only if it can be safely delivered through the city's facilities and if other consumers are not inconvenienced thereby. (Ord. 443 § 1, 1991)

---

**13.04.510 Equipment maintenance required.**

The customer shall, at his own risk and expense, furnish, install and keep in good and safe condition all equipment that may be required for receiving, controlling, applying and utilizing water, and the city shall not be responsible for any loss or damage caused by the improper installation of such equipment, or the negligence or wrongful act of the customer or of any of his tenants, agents, employees, or contractors, licensees or permittees in installing, maintaining, operating or interfering with such equipment. The city shall not be responsible for and will not consider refunds or credits for the loss or wastage of water occasioned by the breakage, leakage or damage to pipe lines on customer's property which is beyond the customer's water meter. The city also shall not be responsible for damage to property caused by faucets, valves and other equipment that are open when water is turned on at the customer's meter, either originally or when turned on after a temporary shutoff. (Ord. 443 § 1, 1991)

---

**13.04.520 Collection by suit—Defendant payment of costs.**

Defendant shall pay all costs of suit in any judgment rendered in favor of the city. (Ord. 443 § 1, 1991)

---

**13.04.530 Hydrants—Authorized use only permitted.**

Fire hydrants are for use by the utility services division (water) or by the department of public safety (fire division). Other parties desiring to use fire hydrants for any purpose must first obtain written permission from the utility services division (water) prior to use and shall operate the hydrant in accordance with instructions issued by the utility services division (water). Unauthorized use of hydrants will be prosecuted according to law. (Ord. 443 § 1, 1991)

---

**13.04.540 Hydrants—Maintenance charge.**

A charge, to be determined by contract between the utility services division (water) and organized fire protection agencies will be imposed for hydrant maintenance and water used for public fire protection. (Ord. 443 § 1, 1991)

---

**13.04.550 Hydrants—Change in location.**

When a fire hydrant has been installed in the location specified by proper authority, the city has fulfilled its obligation. If a property owner or other party desires a change in the size, type or location of the hydrant, he shall bear all costs of such changes without refund. Any change in the location of a fire hydrant must have the approval of the proper authority. (Ord. 443 § 1, 1991)

---

**13.04.560 Private fire protection—Applicant to pay installation cost.**

The applicant for private fire protection service shall pay the total actual cost of installation of the service from the distribution main to the customer's premises, including the cost of an approved double detector check device as per City Standard W-11. Customer shall be responsible for maintenance and testing of such device and meter at cost. (Ord. 443 § 1, 1991)

---

**13.04.570 Private fire protection—Connection with other systems prohibited.**

There shall be no connections between this fire protection system and any other water distribution system on the premises. (Ord. 443 § 1, 1991)

---

**13.04.580 Private fire protection—Fire extinguishing and testing purposes only authorized.**

There shall be no water used through the fire protection service except to extinguish fires and for testing the firefighting equipment. (Ord. 443 § 1, 1991)

---

**13.04.590 Private fire protection—Charges double when—Exception.**

Any consumption recorded on the meter will be charged for at double the regular service rates, except that no charge will be made for water used to extinguish fires where such fires have been reported to the department of public safety (fire division). (Ord. 443 § 1, 1991)

---

**13.04.600 Private fire protection—Rate determination.**

The monthly rates for private fire protection shall be established by the utility services division (water) upon receipt of application. (Ord. 443 § 1, 1991)

---

**13.04.610 Private fire protection—Tank filling authorized when.**

Occasionally water may be obtained from a private fire service for filling a tank connected with a fire service, but only if permission is secured from the utility services division (water) in advance and an approved means of measurement is available. The regular water rates will be applied. (Ord. 443 § 1, 1991)

---

**13.04.620 Private fire protection—Service discontinuance authorized when.**

---

If water is used from a private service in violation of the agreement or of this chapter, the city may, at its option, discontinue and remove the service. (Ord. 443 § 1, 1991)

---

**13.04.630 Private fire protection—Department nonresponsibility for damage.**

The city assumes no responsibility for loss or damage due to lack of water or pressure, either high or low, and merely agrees to furnish such quantities and pressures as are available in its general distribution system. The service is subject to shutdowns and variations required by the operation of the system. (Ord. 443 § 1, 1991)

---

**13.04.640 Private fire protection—Other service connections authorized.**

The city shall have the right to take a domestic, commercial or industrial service connection from the fire service connection at the curb to supply the same premises as those to which the fire service connection belongs. The city shall also have the right to determine the proportion of the installation costs properly chargeable to each service connection, if such segregation of costs shall become necessary. (Ord. 443 § 1, 1991)

---

**13.04.650 Private fire protection—Check valve installation authorized.**

The city reserves the right to install on all fire service connections a double detector check as per City Standard W-11, at the expense of the owner of the property. (Ord. 443 § 1, 1991)

---

**13.04.660 Backflow protective device—Installation required when.**

The customer must comply with state and federal laws governing the separation of dual water systems or installations of backflow protective devices to protect the public water supply from the range of cross-connections. Backflow protective devices must be installed as per city standard and shall be open to test and inspection by the utility services division (water). Plans for the installation of backflow protection devices must be approved by the utility services division (water) prior to installation. (Ord. 443 § 1, 1991)

---

**13.04.670 Pressure relief valves required when.**

As a protection to the customer's plumbing system, a suitable pressure relief valve must be installed and maintained by him, at his expense, when check-valves or other protective devices are used. The relief valve shall be installed between the check-valve and the water heater. (Ord. 443 § 1, 1991)

---

**13.04.680 Backflow protective device—Required on supply lines when.**

Whenever backflow protection has been found necessary on a water supply line entering a customer's premises, then any and all water supply lines from the utility services division (water) mains entering such premises, buildings, or structures shall be protected by an approved backflow device, regardless of the use of the additional water supply lines. (Ord. 443 § 1, 1991)

---

**13.04.690 Backflow protective device—Inspection and testing.**

---

The double check valve or other approved backflow protection devices shall be inspected and tested in accordance with the California Administrative Code Title 17 by the utility services division (water) or a certified tester. The devices shall be serviced, overhauled, or replaced whenever they are found defective, and all costs of repair and maintenance shall be borne by the customer. (Ord. 443 § 1, 1991)

---

**13.04.700 Service discontinuance authorized for check valve installation defected.**

The service of water to any premises may be immediately discontinued by the utility services division (water) if any defect is found in the check valve installations or other protective devices, or if it is found that dangerous unprotected cross-connections exist. Service will not be restored until such defects are corrected. (Ord. 443 § 1, 1991)

---

**13.04.710 Department nonliability for service interruption damage.**

The city shall not be liable for damage which may result from an interruption in service from a cause beyond the control of the utility services division (water). (Ord. 443 § 1, 1991)

---

**13.04.720 Billing—Period.**

The regular billing period will be monthly or bimonthly at the option of the utility services division (water). (Ord. 443 § 1, 1991)

---

**13.04.730 Meters—Reading.**

Meters will be read as nearly as possible on the same day of each month, as near the end of each month as practicable and reasonably possible. (Ord. 443 § 1, 1991)

---

**13.04.740 Opening and closing bill proration.**

Opening and closing bills for less than the normal billing period shall be prorated both as to minimum charges and quantity by blocks of one hundred cubic feet. If the total period for which service is rendered is less than one month, the bill shall not be less than the monthly minimum charge applicable. Closing bills may be estimated by the utility services division (water) for the final period as an expediency to permit the customer to pay the closing bill at the time service is discontinued. (Ord. 443 § 1, 1991)

---

**13.04.750 Charges due when.**

Water charges are due and payable within twenty days of billing date to the property owner or his tenant or agency as designated in the application, and delinquent twenty days after the date indicated on the bill. Service may be discontinued without further notice if payment is not made by the delinquent date. (Ord. 443 § 1, 1991)

---

**13.04.760 Billing—Payment due notice required.**

Bills for metered water services shall be rendered at the end of each billing period. Flat rate service shall be billed in advance. Bills shall be payable on presentation. On each bill for water service rendered by the utility

services division (water) shall be printed substantially as follows: “Payment is due within twenty (20) days of billing date. Service may be turned off if account is unpaid.” (Ord. 443 § 1, 1991)

---

**13.04.770 Billing—Separate bills required—Exception.**

Separate bills will be rendered for each meter installation except where the utility services division (water) has, for its own convenience, installed two or more meters in place of one meter. Where such installations are made the meter readings will be combined for billing purposes. (Ord. 443 § 1, 1991)

---

**13.04.780 Payment guarantee required for turn on.**

The water charge begins when a service connection is installed and the meter is set, unless the water is ordered to be left shut off when the service connection is ordered to be installed. Before water is turned on by the utility services division (water) for any purpose whatever, the property owner or tenant must sign a form in which he guarantees payment of future water bills for the service required. The person signing the guarantee form or meter set form will be held liable for water used until the utility services division (water) is notified in writing to discontinue service or to transfer the account to another owner or tenant. (Ord. 443 § 1, 1991)

---

**13.04.790 Unauthorized water use—Consumer liability.**

A person taking possession of premises and using water from an active service connection without having made application to the utility services division (water) for meter service shall be held liable for the water delivered from the date of the recorded meter reading, and if the meter is found inoperative, the quantity consumed will be estimated. If proper allocation for water service is not made upon notification to do so by the utility services division (water), and if accumulated bills for service are not paid immediately, the service may be discontinued by the utility services division (water) without further notice. (Ord. 443 § 1, 1991)

---

**13.04.800 Department nonliability for wasted water.**

When turning on the water supply as requested, and the house or property is vacant, the utility services division (water) will endeavor to ascertain if water is running on the inside of the building. If such is found to be the case, the water will be left shut off at the curb cock on the inlet side of the meter. The utility services division (water) jurisdiction and responsibility ends at the property line for all purposes, and the utility services division (water) will in no case be liable for loss of wasted water or for damages occasioned by water running from open or faulty fixtures, or from broken, leaking or damaged pipes inside of the property line of the customer. (Ord. 443 § 1, 1991)

---

**13.04.810 Desired discontinuance—Notification required.**

Customers desiring to discontinue service should so notify the utility services division (water) two days prior to vacating the premises. Unless discontinuance of service is ordered, the customer shall be liable for regular charges whether or not any water is used. (Ord. 443 § 1, 1991)

---

**13.04.820 Collection by suit—Authorized when.**

All unpaid rates and charges and penalties provided in this chapter may be collected by suit. (Ord. 443 § 1, 1991)

#### **13.04.830 Service rates.**

---

Each and all premises which are served by a connection to the water system of the city shall be charged and the owner thereof shall pay a water service usage charge based upon a schedule for such charges fixed by resolution duly adopted by the city council. (Ord. 443 § 1, 1991)

#### **13.04.840 Administrative decision appeal—City council action final.**

---

All ruling of the city council shall be final. All administrative decisions of the staff concerning city policies, rules or regulations shall be appealed, if at all, to the city council within ten days subsequent to written notice of such administrative decision; otherwise, the decision shall be deemed final. (Ord. 443 § 1, 1991)

#### **13.04.850 Meter testing—Required when—Procedure.**

---

All meters will be tested prior to installation, and no meter will be installed which registers more than two percent fast. If a customer desires to have the meter serving his premises tested, he shall first deposit the fees required and may be present when the meter is tested in the meter shop of the utility services division (water). Should the meter register more than two percent fast, the deposit will be refunded, but should the meter register less than two percent fast, the deposit will be retained by the utility services division (water). (Ord. 443 § 1, 1991)

#### **13.04.860 Meter testing—Refund authorized when.**

---

If a meter tested at the request of a customer is found to be more than two percent fast, the excess charges for the time service was rendered the customer requesting the test, or for a period of six months, whichever shall be the lesser, shall be refunded to the customer. (Ord. 443 § 1, 1991)

#### **13.04.870 Meter testing—Additional billing authorized when.**

---

If a meter tested at the request of a customer is found to be more than five percent slow, the utility services division (water) may bill the customer for the amount of the undercharge based upon corrected meter readings for the period, not exceeding six months, that the meter was in use. (Ord. 443 § 1, 1991)

#### **13.04.880 Charge estimate when meter not registering.**

---

If a meter is found to be not registering, the charges for service shall be at the minimum monthly rate or based on the estimated consumption, whichever is greater. Such estimates shall be made from previous consumption records for a comparable period or by such other method as is determined by the utility services division (water) and its decision shall be final. (Ord. 443 § 1, 1991)

#### **13.04.890 Service discontinuance authorized for nonpayment.**

---

Service may be discontinued for nonpayment of bills on or before the twentieth day following the date of billing. (Ord. 443 § 1, 1991)



#### **13.04.900 Failure to receive bill no relief of liability.**

---

Failure to receive a bill for service rendered does not relieve consumer of liability. Any amount due shall be deemed a debt to the city, and any person, firm or corporation failing, neglecting or refusing to pay such indebtedness shall be liable to an action in the name of the city in any court of competent jurisdiction for the amount thereof. (Ord. 443 § 1, 1991)

#### **13.04.910 Reconnection charge—Meter removal charge.**

---

A reconnection charge, plus penalties as per resolution shall be made and collected prior to renewing service following a discontinuance of water service due to nonpayment of bill, and an additional charge shall be made whenever it is deemed necessary to remove the meter from the premises. (Ord. 443 § 1, 1991)

#### **13.04.920 Delinquent charge penalty.**

---

Rates and charges which are not paid on or before the day of delinquency shall be subject to a penalty of ten percent and thereafter shall be subject to a further penalty of two percent per month on the first day of each month following. (Ord. 443 § 1, 1991)

#### **13.04.930 Security deposit charge.**

---

The security deposit is the charge which insures payment of minimum utility service division (water) charges. Upon discontinuance of service the security deposit shall be applied to reduce any unpaid charges outstanding on the customer's account. The amount of deposit required shall be established by the city council in the resolution on fees. The security deposit shall be refunded to the customer as provided in this section. (Ord. 443 § 1, 1991)

#### **13.04.940 Waste or nuisance water and other substances.**

---

It is unlawful for any person, firm or corporation to deposit, drain, wash, allow to run or divert into or upon any public road, highway, street or alley, drainage ditch, storm drain or flood control channel owned by or controlled by any public agency within the city, any water, mud, or sand; except that, upon written application of any person filed with the city and approved by the director of public services, the city may, upon such terms and conditions as it may deem advisable to impose, including the charging of a fee therefor, grant a permit to such person to do any of the acts prohibited by this section, provided the same shall not be detrimental to the public health, safety or welfare. For purposes of enforcement of this section, the owner of the meter or property which is the source of the waste or nuisance water or other substance as defined in this section is considered the party responsible for any violations cited under this section. (Ord. 443 § 1, 1991)

#### **13.04.950 Conservation measures—Stage No. 1 normal conditions—Voluntary conservation measures.**

---

Normal conditions shall be in effect when the city is able to meet all the water demands of its customers in the immediate future. During normal conditions all water users should continue to use water wisely, to prevent the waste or unreasonable use of water, and to reduce water consumption to that necessary for ordinary domestic and commercial purposes. (Ord. 443 § 1, 1991)

#### **13.04.960 Stage No. 2—Threatened water supply shortage.**

---

In the event of a threatened water supply shortage which could affect the city's ability to provide water for ordinary domestic and commercial uses, the city council shall hold a public hearing at which consumers of the water supply shall have the opportunity to protest and to present their respective needs to the city. The city council may then, by resolution, declare a water shortage condition to prevail, and the following conservation measures shall be in effect.

A. Exterior Landscape Plans. Exterior landscape plans for all new commercial and industrial development shall provide for timed irrigation and shall consider the use of drought resistant varieties of flora. Such plans shall be presented and approved by the city prior to issuance of a water service letter.

B. Excessive Irrigation and Related Waste. No customer of the city or other person acting on behalf of or under the direction of a customer shall cause or permit the use of water for irrigation of landscaping or other outdoor vegetation, plantings, lawns or other growth, to exceed the amount required to provide reasonable or excessive waste of water from such irrigation activities or from watering devices or systems. The free flow of water away from an irrigated site shall be presumptively considered excessive irrigation and waste as defined.

C. Agricultural Irrigation. Persons receiving water from the city who are engaged in commercial agricultural practices, whether for the purpose of crop production or growing of ornamental plants shall provide, maintain and use irrigation equipment and practices which are the most efficient possible. Upon the request of the director of public services, these persons may be required to prepare a plan describing their irrigation practices and equipment, including but not limited to, an estimate of the efficiency of the use of water on their properties.

D. Commercial Facilities. Commercial and industrial facilities shall, upon request of the director of public services, provide the city with a plan to conserve water at their facilities. The city will provide these facilities with information regarding the average monthly water use by the facility for the last two-year period. The facility will be expected to provide the city with a plan to conserve or reduce the amount of water used by that percentage deemed by the city council to be necessary under the circumstances. After review and approval by the director of public services, the water conservation plan shall be considered subject to inspection and enforcement by the city.

E. Parks, Golf Courses, Swimming Pools and School Grounds. Public and private parks, golf courses, swimming pools and school grounds which use water provided by the city shall use water for irrigation and pool filling between the hours of six p.m. and six a.m.

F. Domestic Irrigation. Upon notice and public hearing, the city may determine that the irrigation of exterior vegetation shall be conducted only during specified hours and/or days, and may impose other restrictions on the use of water for such irrigation. The irrigation of exterior vegetation at other than these times shall be considered to be a waste of water.

G. Swimming Pool. All residential, public and recreational swimming pools, of all sizes, shall use evaporation resistant covers and shall recirculate water. Any swimming pool which does not have a cover installed during periods of nonuse shall be considered a waste of water.

H. Runoff and Washdown. No water provided by the city shall be used for the purposes of washdown of impervious areas without specific written authorization of the director of public services. Any water used on a premises that is allowed to escape the premises and run off into gutters or storm drains shall be considered a waste of water.

I. Vehicle Washing. The washing of cars, trucks or other vehicles is not permitted, except with a hose equipped with an automatic shut-off device, or at a commercial facility designated and so designated on the city's billing records.

J. Drinking Water Provided by Restaurants. Restaurants are requested not to provide drinking water to patrons except by request. (Ord. 443 § 1, 1991)

#### **13.04.970 Stage No. 3—Water shortage emergency—Mandatory conservation measures.**

---

In the event of a water shortage emergency in which the city may be prevented from meeting the water demands of its customers, the city council shall, if possible given the time and circumstances, immediately hold a public hearing at which customers of the city shall have the opportunity to protest and to present their respective needs to the city council. No public hearing shall be required in the event of a breakage or failure of a pump, pipeline, or conduit causing an immediate emergency. The director of public services is empowered to declare a water shortage emergency, subject to the ratification of the city council within seventy-two hours of such declaration, and the following rules and regulations shall be in effect immediately following such declarations:

- A. Prohibition. Watering of parks, school grounds, golf courses, lawn watering, landscape irrigation, washdown of driveways, parking lots or other impervious surfaces, washing of vehicles, except when done by commercial car wash establishments using only recycled or reclaimed water, filling or adding water to swimming pools, wading pools, spas, ornamental ponds, fountains and artificial lakes are prohibited.
- B. Restaurants. Restaurants shall not serve drinking water to patrons except by request.
- C. Construction Meters. No new construction meter permits shall be issued by the city. All existing construction meters shall be removed and/or locked.
- D. Commercial Nurseries and Livestock. Commercial nurseries shall discontinue all watering and irrigation. Watering of livestock is permitted as necessary. (Ord. 443 § 1, 1991)

#### **13.04.980 Mandatory compliance—Implementation and termination.**

---

The director of public services of the city shall monitor the supply and demand for water on a daily basis to determine the level of conservation required by the implementation or termination of the water conservation plan stages and shall notify the city council of the necessity for the implementation or termination of each stage. Each declaration of the city council implementing or terminating a water conservation stage shall be published at least once in a newspaper of general circulation, and shall be posted at the city offices. Each declaration shall remain in effect until the city council otherwise declares, as provided in this section. (Ord. 443 § 1, 1991)

#### **13.04.990 Mandatory compliance—Exception permits.**

---

The director of public services may grant permits for uses of water otherwise prohibited under the provisions of this chapter if he finds and determines that restrictions herein would either:

- A. Hardship. Cause an unnecessary and undue hardship to the water user or the public; or
- B. Emergency. Cause an emergency condition affecting the health, sanitation, fire protection or safety of the water use or of the public. (Ord. 443 § 1, 1991)

#### **13.04.1000 Exception granted.**

---

Such exceptions may be granted only upon written application therefor. Upon granting such exception permit, the director of public services may impose any conditions he determines to be just and proper. (Ord. 443 § 1, 1991)

#### **13.04.1010 Enforcement, inspection.**

---

Authorized employees of the city, after proper identification may, during reasonable hours, inspect any facility having a water conservation plan, and may enter onto private property for the purpose of observing the operation of any water conservation device, irrigation equipment or water facility. Employees of the city may also observe the use of water or irrigation equipment within the city from public rights-of-way and as alleged violations are reported to the city. (Ord. 443 § 1, 1991)

#### **13.04.1020 Civil penalties for violation.**

---

Violators of the mandatory provisions of this chapter shall be subject to civil action initiated by the city as follows:

A. First Violation. For a first violation, the city shall issue a written notice of violation to the water user violating the provisions of this chapter. The notice shall be given pursuant to the requirements listed in Sections 13.04.970 and 13.04.980.

B. Second Violation. For a second violation of this chapter within a twelve-month period or for failure to comply with the notice of violation within the period stated, a surcharge of one hundred dollars is imposed for the meter through which the wasted water was supplied.

C. Third Violation. For a third violation of this chapter within a twelve-month period, or for continued failure to comply within thirty days after notice of an imposition of second violation sanctions, a one-month penalty surcharge in the amount of two hundred dollars is imposed for the meter through which the wasted water was supplied. In addition to the surcharge, the city may, at its discretion, install a flow-restricting device at such meter with a one-eighth inch orifice for services up to one and one-half inch size, and comparatively sized restrictors for larger services, on the service of the customer at the premises at which the violation occurred for a period of not less than forty-eight hours. The charge to the customer for installing a flow-restricting device shall be based upon the size of the meter and the actual cost of installation but shall not be less than that provided in the city's rules and regulations. The charge for removal of the flow-restricting device and restoration of normal service shall be as provided in the city's rules and regulations.

D. Subsequent Violations—Discontinuance of Service. For any subsequent violation of this chapter within the twenty-four calendar months after a first violation as provided in this section, the penalty surcharge shall be imposed and the city may discontinue water service to that customer at the premises or to the meter where the violation occurred. The charge for reconnection and restoration of normal service shall be as provided in the rules and regulations of the city. Such restoration of service shall not be made until the director of public services of the city has determined that the water user has provided reasonable assurances that future violations of this chapter by such user will not occur. (Ord. 443 § 1, 1991)

#### **13.04.1030 Notification of violation.**

---

A. First Violation. For a first violation, written notice shall be given to the customer and/or property owner personally or by regular mail.

B. Subsequent Violation. If the penalty assessed is a surcharge for a second or third violation, notice may be given by regular mail.

C. Penalties Involving Installation of Flow-restrictors or Discontinuance of Water Service. If the penalty assessed is, or includes, the installation of a flow restrictor or the discontinuance of water service to the customer for any period of time, notice of the violation shall be given in the following manner:

1. Personal Service. By giving written notice thereof to the occupant and/or property owner personally, or if the occupant and/or property owner is absent from his/her place of residence and from his/her assumed place of business, by leaving a copy with some person of suitable age and discretion at either place, and

sending a copy through the United States mail addressed to the occupant and/or owner of his/her place of business or residence; or

2. Posting. If such place of residence and business cannot be ascertained, or a person of suitable age or discretion cannot be located, then by affixing a copy in a conspicuous place on the property where the failure to comply is occurring and also by delivering a copy to a person there residing, if such person can be found, and also sending a copy through the United States mail addressed to the occupant at the place where the property is situated and to the owner if different. (Ord. 443 § 1, 1991)

---

#### **13.04.1040 Form of notice.**

All notices provided for in Section 13.04.1030 shall contain, in addition to the facts of the violation, a statement of the possible penalties for each violation and a statement informing the occupant/owner of his/her right to a hearing on the violation. (Ord. 443 § 1, 1991)

---

#### **13.04.1050 Hearing.**

Any customer or property owner against whom a penalty is levied pursuant to this chapter shall have a right to a hearing, in the first instance by the director of public services, with the right of appeal to the city council, on the merits of the alleged violation upon the written request of that customer within fifteen days of the date of alleged violation. At the next regularly scheduled meeting, the customer may then appear and present any evidence in support of his position and ask for a decision by the city council. (Ord. 443 § 1, 1991)

---

#### **13.04.1060 Delays on action.**

The city council shall act promptly to resolve the dispute, but may delay a resolution of the dispute to the time of its next regular meeting in order to investigate the dispute or receive special reports related to the dispute. (Ord. 443 § 1, 1991)

---

#### **13.04.1070 Decision of the city council.**

The decision of the city council shall be final. Should the city council not render a decision within sixty days of application to the city council, this failure to act shall be deemed a denial of the requested action, unless both parties have agreed to extend the resolution period. (Ord. 443 § 1, 1991)

---

View the [mobile version](#).

Loma Linda Municipal Code							
Up	Previous	Next	Main	Collapse	Search	Print	No Frames
<a href="#">Title 13 WATER AND SEWERS</a>							

## Chapter 13.32 WATER-EFFICIENT LANDSCAPE

### 13.32.010 Purpose.

- A. The State Legislature has found that:
  1. The limited supply of state waters are subject to ever increasing demands;
  2. California's economic prosperity depends on adequate supplies of water;
  3. State Policy promotes conservation and efficient use of water;
  4. Landscapes provide recreation areas, clean the air and water, prevent erosion, offer fire protection and replace ecosystems displaced by development; and
  5. Landscape design, installation and maintenance can and should be water efficient.
- B. Consistent with the legislative findings, the purpose of this chapter is to:
  1. Promote the values and benefits of landscapes while recognizing the need to invest water and other resources as efficiently as possible;
  2. Establish a structure for designing, installing and maintaining water-efficient landscapes in new projects; and
  3. Establish provisions for water management practices and water waste prevention for established landscapes. (Ord. 488 § 1, 1992)

### 13.32.020 Definitions.

The words used in this chapter have the meaning set forth below:

"Anti-drain valve" or "check valve" means a valve located under a sprinkler head to hold water in the system so it minimizes drainage from the lower elevation sprinkler heads.

"Application rate" means the depth of water applied to a given area, usually measured in inches per hour.

"Applied water" means the portion of water supplied by the irrigation system to the landscape.

"As-builts" means a set of reproducible drawings which show significant changes in the work made during construction and which are usually based on drawings marked up in the field and other data furnished by the contractor.

"Automatic controller" means a mechanical or solid state timer, capable of operating valve stations to set the days and length of time of a water application.

"Backflow prevention device" means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.

"Conversion factor (0.62)" means a number that converts the maximum applied water allowance from acre-inches per acre per year to gallons per square foot per year. The conversion factor is calculated as follows:

$$(325,829 \text{ gallons}/43,560 \text{ square feet})/12 \text{ inches} = (0.62)$$

$$325,829 \text{ gallons} = \text{one acre foot}$$

$$43,560 \text{ square feet} = \text{one acre}$$

$$12 \text{ inches} = \text{one foot}$$

To convert gallons per year to 100-cubic-foot per year, another common billing unit for water, divide gallons per year by 748. (748 gallons = 100 cubic feet.)

"Ecological restoration project" means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.

"Effective precipitation" or "usable rainfall" means the portion of total precipitation that is used by the plants. Precipitation is not a reliable source of water, but can contribute to some degree toward the water needs of the landscape.

"Emitter" means drip irrigation fittings that deliver water slowly from the system to the soil.

"Established landscape" means the point at which plants in the landscape have developed roots into the soil adjacent to the root ball.

"Established period" means the first year after installing the plant in the landscape.

"Estimated applied water use" means the portion of the estimated total water use is derived from applied water. The estimated applied water use shall not exceed the maximum applied water allowance. The estimated applied water use may be the sum of the water recommended through the irrigation schedule.

"Estimated total water use" means the annual total amount of water estimated to be needed to keep the plants in the landscaped area healthy. It is based upon such factors as the local evapotranspiration rate, the size of the landscaped area, the types of plants and the efficiency of the irrigation system.

"ET adjustment factor" means a factor of 0.8, that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape.

A combined plant mix with a site-wide average of 0.5 is the basis of the plant factor portion of this calculation. The irrigation efficiency for purposes of the ET adjustment factor is 0.625, therefore, the ET adjustment factor  $(0.8) = (0.5/0.625)$ .

"Evapotranspiration" means the quantity of water evaporated from adjacent soil surfaces and transpired by plants during a specific time.

"Flow rate" means the rate at which water flows through pipes and valves (gallons per minute or cubic feet per second).

"Hydrozone" means a portion of the landscaped area having plants with similar water needs that are served by a valve or set of valves with the same schedule. A hydrozone may be irrigated or non-irrigated. For example, a naturalized area planted with native vegetation that will not need supplemental irrigation once established is a non-irrigated hydrozone.

"Infiltration rate" means the rate of water entry into the soil expressed as a depth of water per unit of time (inches per hour).

"Irrigation efficiency" means the measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The minimum irrigation efficiency for purposes of this chapter is 0.625. Greater irrigation efficiency can be expected from well designed and maintained systems.

"Landscape irrigation audit" means a process to perform site inspections, evaluate irrigation systems and develop efficient irrigation schedules.

"Landscaped area" means the entire parcel less the building footprint, driveways, non-irrigated portions of parking lots, hardscapes — such as decks and patios and other non-porous areas. Water features are included in the calculation of the landscaped area. Areas dedicated to edible plants, such as orchards or vegetable gardens are not included.

"Lateral line" means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.

"Main line" means the pressurized pipeline that delivers water from the water source to the valve or outlet.

"Maximum applied water allowance" means, for design purposes, the upper limit of annual applied water for the established landscaped area. It is based upon the area's reference evapotranspiration, the ET adjustment factor, and the size of the landscaped area. The estimated applied water use shall not exceed the maximum applied water allowances.

"Mined-land reclamation projects" means any surface mining operation with a reclamation plan approved in accordance with the Surface Mining and Reclamation Act of 1975.

“Mulch” means any material such as leaves, bark, straw or other materials left loose and applied to the soil surface to reduce evaporation.

“Operating pressure” means the pressure at which a system of sprinklers is designed to operate, usually indicated at the base of a sprinkler.

“Overspray” means the water which is delivered beyond the landscaped area, wetting pavements, walks, structures or other non-landscaped areas.

“Plant factor” means a factor that when multiplied by reference evapotranspiration, estimates the amount of water used by plants. For purposes of this chapter, the average plant factor or low water using plants ranges from 0 to 0.3, for average water using plants the range is 0.4 to 0.6, and for high water using plants the range is 0.7 to 1.0.

“Rain sensing device” means a system which automatically shuts off the irrigation system when it rains.

“Record drawing” or “as-builts” means a set of reproducible drawings which show significant changes in the work made during construction and which are usually based on drawings marked up in the field and other data furnished by the contractor.

“Recreational area” means areas of active play or recreation such as sports fields, school yards, picnic grounds or other areas with intense foot traffic.

“Recycled water,” “reclaimed water,” or “treated sewage effluent water” means treated or recycled waste water of a quality suitable for nonpotable uses such as landscape irrigation; not intended for human consumption.

“Reference evapotranspiration” or “ETo” means a standard measurement of environmental parameters which affect the water use of plants. ETo is given in inches per day, month, or year, and is an estimate of the evapotranspiration of a large field of four-inch to seven-inch tall, cool-season grass that is well watered. Reference evapotranspiration is used as the basis of determining the maximum applied water allowances so that regional differences in climate can be accommodated.

“Rehabilitated landscape” means any re-landscaping project that requires a permit.

“Run off” means water which is not absorbed by the soil or landscape to which it is applied and flows from the area. For example, run off may result from water that is applied at too great a rate (application rate exceeds infiltration rate) or when there is a severe slope.

“Soil moisture sensing device” means a device that measures the amount of water in the soil.

“Soil texture” means the classification of soil based on the percentage of sand, silt, and clay in the soil.

“Sprinkler head” means a device which sprays water through a nozzle.

“Static water pressure” means the pipeline or municipal water supply pressure when water is not flowing.

“Station” means an area served by one valve or by a set of valves that operate simultaneously.

“Turf” means a surface layer of earth containing mowed grass with its roots. Annual bluegrass, Kentucky bluegrass, perennial ryegrass, red fescue, and tall fescue are cool-season grasses. Bermudagrass, kikuyugrass, seashore paspalum, St. Augustinegrass, zoysiagrass, and buffalo grass are warm-season grasses.

“Usable rainfall” means the portion of total precipitation that is used by the plants. Precipitation is not a reliable source of water, but can contribute to some degree toward the water needs of the landscape.

“Valve” means a device used to control the flow of water in the irrigation system.

“Water conservation concept statement” means a one-page checklist and a narrative summary of the project as shown in Exhibit “A” set out following this chapter. (Ord. 488 § 1, 1992)

### **13.32.030 Provisions for new or rehabilitated landscapes.**

- A. **APPLICABILITY.**
  1. Except as provided in Section 13.32.030(A)(3), this section shall apply to:
    - a. All new and rehabilitated landscaping for public agency projects and private development projects that requires a permit; and
    - b. Developer-installed landscaping in landscape maintenance district areas of single-family and multi-family projects.
  2. Projects subject to this section shall conform to the provisions in this chapter.
  3. This section shall not apply to:
    - a. Homeowner-provided landscaping at single-family and multi-family projects;
    - b. Cemeteries;
    - c. Registered historical sites;
    - d. Ecological restoration projects that do not require a permanent irrigation system; or
    - e. Mined-land reclamation projects that do not require a permanent irrigation system; or
    - f. Any project with a landscaped area less than twenty-five thousand square feet.
- B. **LANDSCAPE DOCUMENTATION PACKAGE.**
  1. A copy of the landscape documentation package conforming to this chapter shall be submitted to the city or county. No permit shall be issued until the city or county reviews and approves the landscape documentation package.
  2. A copy of the approved landscape documentation package shall be provided to the property owner or site manager along with the record drawings and any other information normally forwarded to the property owner or site manager.
  3. A copy of the water conservation concept statement and the certificate of substantial completion shall be sent by the project manager to the local retail water purveyor.
  4. Each landscape documentation package shall include the following elements, which are described herein:
    - a. Water conservation concept statement;
    - b. Calculation of the maximum applied water allowance;
    - c. Calculation of the estimated applied water use;
    - d. Calculation of the estimated total water use;
    - e. Landscape design plan;
    - f. Irrigation design plan;
    - g. Irrigation schedule;
    - h. Maintenance schedule;
    - i. Landscape irrigation audit schedule;
    - j. Grading design plan;
    - k. Soil analysis;
    - l. Certificate of substantial completion (to be submitted after installation of the project.)
  5. If effective precipitation is included in the calculation of the estimated total water use, then an effective precipitation disclosure statement from the landscape professional and the property owner shall be submitted with the landscape documentation package.
- C. **ELEMENTS OF LANDSCAPE DOCUMENTATION PACKAGE.**
  1. **Water Conservation Concept Statement.** Each landscape documentation package shall include a cover sheet, referred to as the water conservation concept statement similar to the following example. It serves as a check list to verify that the elements of the landscape documentation package have been completed and has a narrative summary of the project.

2. The Maximum Applied Water Allowance.

- a. A project's maximum applied water allowance shall be calculated using the following formula:

MAWA	=	(ETo) (.8) (LA) (.62) where:
MAWA	=	Max. applied water allowance (gallons per year)
ETo	=	Reference evapotranspiration (inches per year)
0.8	=	ET adjustment factor
LA	=	Landscaped area (square feet)
0.62	=	Conversion factor (to gallons per square foot)

b. Two example calculations of the maximum applied water allowance

- i. Project Site One: Landscaped area of 50,000 sq. ft. in Fresno

MAWA	=	(ETo) (.8) (LA) (.62)
	=	(51 inches) (.8) (50,000 square feet) (.62)
		Maximum applied water allowance = 1,264,800 gallons per year (or 1,691 hundred-cubic-feet per year; 1,264,800/748 = 1,691)

- ii. Project Site Two: Landscaped area of 50,000 sq. ft. in San Francisco

MAWA	=	(ETo) (.8) (LA) (.62)
	=	(35 inches) (.8) (50,000 square feet) (.62)
		Maximum Applied Water Allowance = 868,000 gallons per year (or 1,160 hundred-cubic-feet per year)

c. Portions of landscaped areas in public and private projects such as parks, playgrounds, sports fields, golf courses, or school yards where turf provides a playing surface or serves other recreational purposes may require water in addition to the maximum applied water allowance. A statement shall be included with the landscape design plan, designating areas to be used for such purposes and specifying any needed amount of additional water above the maximum applied water allowance.

3. Estimated Applied Water Use.

- a. The estimated applied water use shall not exceed the maximum applied water allowance.
- b. A calculation of the estimated applied water use shall be submitted with the landscape documentation package. It may be calculated by summing the amount of water recommended in the irrigation schedule.

4. Estimated Total Water Use.

- a. A calculation of the estimated total water use shall be submitted with the landscape documentation package. The estimated total water use may be calculated by summing the amount of water recommended in the irrigation schedule and adding any amount of water expected from effective precipitation (not to exceed twenty-five percent of the local annual mean precipitation) or may be calculated from a formula such as the following:

The estimated total water use for the entire landscaped area equals the sum of the estimated water use of all hydrozones in that landscaped area:

EWU (hydrozone)	=	$\frac{(ET_o)(PF)(HA)(.62)}{(IE)}$
EWU (hydrozone)	=	Estimated water use (gallons per year)
ETo	=	Reference evapotranspiration (inches per year)
PF	=	Plant factor
HA	=	Hydrozone area (square feet)
(.62)	=	Conversion factor
IE	=	Irrigation efficiency

- b. If the estimated total water use is greater than the estimated applied water use due to precipitation being included as a source of water, an effective precipitation disclosure statement such as the one in the section entitled "Effective Precipitation" shall be included in the landscape documentation package.

5. Landscape Design Plan. A landscape design plan meeting the following requirements shall be submitted as part of the landscape documentation package:

- a. Plant Selection and Grouping.
- i. Any plants may be used in the landscape, providing the estimated applied water use recommended does not exceed the maximum applied water allowance and that the plants meet the specifications set forth in subsections (a)(ii), (a)(iii), and (a)(iv) immediately following.
- ii. Plants having similar water use shall be grouped together in distinct hydrozones.
- iii. Plants shall be selected appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the site. Protection and preservation of native species and natural areas is encouraged. The planting of trees is encouraged wherever it is consistent with the other provisions of this chapter.
- iv. Fire prevention needs shall be addressed in areas that are fire prone. Information about fire prone areas and appropriate landscaping for fire safety is available from local fire departments or the California Department of Forestry.
- b. Water Features.
- i. Recirculating water shall be used for decorative water.
- ii. Pool and spa covers are encouraged.
- c. Landscape Design Plan Specifications. The landscape design plan shall be drawn on project base sheets at a scale that accurately and clearly identifies:
- i. Designation of hydrozones;
- ii. Landscape materials, trees, shrubs, groundcover, turf, and other vegetation. Planting symbols shall be clearly drawn and plants labeled by botanical name, common name, container size, spacing, and quantities of each group of plants indicated;



- iii. Property lines and street names;
  - iv. Streets, driveways, walkways, and other paved areas;
  - v. Pools, ponds, water features, fences and retaining walls;
  - vi. Existing and proposed buildings and structures including elevation if applicable;
  - vii. Natural features including but not limited to rock outcroppings, existing trees, shrubs that will remain;
  - viii. Tree staking, plant installation, soil preparation details, and any other applicable planting and installation details;
  - ix. A calculation of the total landscaped area;
  - x. Designation of recreational areas.
6. Irrigation Design Plan. An irrigation design plan meeting the following conditions shall be submitted as part of the landscape documentation package:
- a. Irrigation Design Criteria.
    - i. Runoff and Overspray. Soil types and infiltration rate shall be considered when designing irrigation systems. All irrigation systems shall be designed to avoid runoff, low head drainage, overspray, or other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, roadways or structures. Proper irrigation equipment and schedules, including features such as repeat cycles, shall be used to closely match application rates to infiltration rates therefore minimizing runoff.
 

Special attention shall be given to avoid runoff on slopes and to avoid overspray in planting areas with a width less than ten feet, and in median strips. No overhead sprinkler irrigation systems shall be installed in median strips less than ten feet wide.
    - ii. Irrigation Efficiency. For the purpose of determining the maximum water allowance, irrigation efficiency is assumed to be 0.625. Irrigation systems shall be designed, maintained, and managed to meet or exceed 0.625 efficiency.
    - iii. Equipment.
      - (A) Water Meters. Separate landscape water meters shall be installed for all projects except for single family homes or any projects except for single-family homes or any project with a landscaped area of less than five thousand square feet.
      - (B) Controllers. Automatic control systems shall be required for all irrigation systems and must be able to accommodate all aspects of the design.
      - (C) Valves. Plants which require different amounts of water shall be irrigated by separate valves. If one valve is used for a given area, only plants with similar water use shall be used in that area. Anti-drain (check) valves shall be installed in strategic points to minimize or prevent low-head drainage.
      - (D) Sprinkler Heads. Heads and emitters shall have consistent application rates within each control valve circuit. Sprinkler heads shall be selected for proper area coverage, application rate, operating pressure, adjustment capability, and ease of maintenance.
      - (E) Rain Sensing Override Devices. Rain sensing override devices shall be required on all irrigation systems.
      - (F) Soil Moisture Sensing Devices. It is recommended that soil moisture sensing devices be considered where appropriate.
    - b. Recycled Water.
      - i. The installation of recycled water irrigation systems (dual distribution systems) shall be required to allow for the current and future use of recycled water, unless a written exemption has been granted as described in the following subsection (b)(ii).
      - ii. Irrigation systems shall make use of recycled water unless a written exemption has been granted by the local water agency, stating that recycled water meeting all health standards is not available and will not be available in the foreseeable future.
      - iii. The recycled water irrigation systems shall be designed and operated in accordance with all local and state codes.
      - c. Irrigation Design Plan Specifications. Irrigation systems shall be designed to be consistent with hydrozones. The irrigation design plan shall be drawn on project base sheets. It should be separate from, but use the same format as, the landscape design plan. The scale shall be the same as that used for the landscape design plan.
 

The irrigation design plan shall accurately and clearly identify:

        - i. Location and size of separate water meters for the landscape;
        - ii. Location, type and size of all components of the irrigation system, including automatic controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, and backflow prevention devices;
        - iii. Static water pressure at the point of connection to the public water supply;
        - iv. Flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (psi) for each station;
        - v. Recycled water irrigation systems as specified in this chapter.
7. Irrigation Schedules. Irrigation schedules satisfying the following conditions shall be submitted as part of the landscape documentation package:
- a. An annual irrigation program with monthly irrigation schedules shall be required for the plant establishment period, for the established landscape, and for any temporarily irrigated areas.
  - b. The irrigation schedule shall:
    - i. Include run time (in minutes per cycle), suggested number of cycles per day, and frequency of irrigation for each station; and
    - ii. Provide the amount of applied water (in hundred cubic feet, gallons or whatever billing units the local water supplier uses) recommended on a monthly and annual basis.
    - c. The total amount of water for the project shall include water designated in the estimated total water use calculation plus water needed for any water features, which shall be considered as a high water using hydrozone.
    - d. Recreational areas designated in the landscape design plan shall be highlighted and the irrigation schedule shall indicate if any additional water is needed above the maximum applied water allowance because of high plant factors (but not due to irrigation inefficiency).
    - e. Whenever possible, irrigation scheduling shall incorporate the use of evapotranspiration data such as those from the California Irrigation Management Information System (CIMIS) weather stations to apply the appropriate levels of water for different climates.
    - f. Whenever possible, landscape irrigation shall be between two a.m. and ten a.m. to avoid irrigating during times of high wind or high temperature.
  - 8. Maintenance Schedules. A regular maintenance schedule satisfying the following conditions shall be submitted as part of the landscape documentation package:
    - a. Landscapes shall be maintained to ensure water efficiency. A regular maintenance schedule shall include but not be limited to checking, adjusting, and repairing irrigation equipment; resetting the automatic controller; aerating and dethatching turf areas; replenishing mulch; fertilizing; pruning, and weeding in all landscaped areas.
    - b. Whenever possible, repair of irrigation equipment shall be done with the originally specified materials or their equivalents.
  - 9. Landscape Irrigation Audit Schedules. A schedule of landscape irrigation audits, for all but single-family residences, satisfying the following conditions shall be submitted to the city or county as part of the landscape documentation package:
    - a. At a minimum, audits shall be in accordance with the state of California Landscape Water Management Program as described in the Landscape Irrigation Auditor Handbook, the entire document, which is incorporated by reference. (See Landscape Irrigation Auditor Handbook (June 1990) Version 5.5 [formerly Master Auditor Training].)
    - b. The schedule shall provide for landscape irrigation audits to be conducted by certified landscape irrigation auditors at least once every five years.
  - 10. Grading Design Plan. Grading design plans satisfying the following conditions shall be submitted as part of the landscape documentation package:
    - a. A grading design plan shall be drawn on project base sheets. It should be separate from but use the same format as the landscape design plan.

b. The grading design plan shall indicate finished configurations and elevations of the landscaped area, including the height of graded slopes, drainage patterns, pad elevations, and finish grade.

11. Soils.

a. A soil analysis satisfying the following conditions shall be submitted as part of the landscape documentation package:

- i. Determination of soil texture, indicating the percentage of organic matter;
  - ii. An approximate soil infiltration rate (either measured or derived from soil texture/infiltration rate tables). A range of infiltration rates should be noted where appropriate;
  - iii. Measure of pH, and total soluble salts.
- b. A mulch of at least three inches shall be applied to all planting areas except turf.

12. Certification.

- a. Upon completing the installation of the landscaping and the irrigation system, an irrigation audit shall be conducted by a certified landscape irrigation auditor prior to the final field observation. (See Landscape Irrigation Auditor Handbook as referenced in Section 13.32.040.)
- b. A licensed landscape architect or contractor, certified irrigation designer, or other licensed professional in a related field shall conduct a final field observation and shall provide a certificate of substantial completion to the city or county. The certificate shall specifically indicate that plants were installed as specified, that the irrigation system was installed as designed, and that an irrigation audit has been performed, along with a list of any observed deficiencies.
- c. Certification shall be accomplished by completing a certificate of substantial completion and delivering it to the city or county, to the retail water supplier, and to the owner of record. A sample of such a form, which shall be provided by the city or county is set out in Exhibit "B" following this chapter.
- D. PUBLIC EDUCATION—PUBLICATIONS. Local agencies shall provide information to owners of all new, single-family residential homes regarding the design, installation, and maintenance of water efficient landscapes.

Information about the efficient use of landscape water shall be provided to water users throughout the community. (Ord. 488 § 1, 1992)

**13.32.040 Provisions for existing landscapes.**

---

A. Water Management. All existing landscaped areas to which the city or county provides water that are one acre or more shall have a landscape irrigation audit at least every five years. At a minimum, the audit shall be in accordance with the California Landscape Water Management Program as described in the Landscape Irrigation Auditor Handbook, the entire document which is hereby incorporated by reference. (See Landscape Irrigation Auditor Handbook, Dept. of Water Resources, Water Conservation Office (June 1990) Version 5.5.)

- 1. If the project's water bills indicate that they are using less than or equal to the maximum applied water allowance for that project site, an audit shall not be required.
- 2. Recognition of projects that stay within the maximum applied water allowance is encouraged.

B. Water Waste Prevention. Cities and counties shall prevent water waste resulting from inefficient landscape irrigation by prohibiting runoff, low head drainage, overspray, or other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, roadways or structures. Penalties for violation of these prohibitions shall be established locally. (Ord. 488 § 1, 1992)

**13.32.050 Effective precipitation.**

---

SAMPLE CERTIFICATE OF SUBSTANTIAL COMPLETION

If effective precipitation is included in the calculation of the estimated total water use, an effective precipitation disclosure statement (similar to the sample Exhibit "C" set out following this chapter) shall be completed, signed, and submitted with the landscape documentation package. No more than twenty-five percent of the local annual mean precipitation shall be considered effective precipitation in the calculation of the estimated total water use. (Ord. 488 § 1, 1992)

**EXHIBIT "A" SAMPLE WATER CONSERVATION CONCEPT STATEMENT**

---

Project Site:

Project Number:

Project Location:

Landscape Architect/Irrigation Designer/Contractor:

Included in this project submittal package are:

(Check to indicate completion)

\_\_\_ 1. Maximum Applied Water Allowance:  
\_\_\_ gallons or cubic feet/year

\_\_\_ 2. Estimated Applied Water Use:  
\_\_\_ gallons or cubic feet/year

\* \_\_\_ 2.(a) Estimated Amount of Water Expected from Effective Precipitation:  
\_\_\_ gallons or cubic feet/year

\_\_\_ 3. Estimated Total Water Use:  
\_\_\_ gallons or cubic feet/year

Note: \* If the design assumes that a part of the Estimated Total Water Use will be provided by precipitation, the Effective Precipitation Disclosure Statement in Section 704 shall be completed and submitted. The Estimated Amount of Water Expected from Effective Precipitation shall not exceed 25 percent of the local annual mean precipitation (average rainfall).

- \_\_\_ 4. Landscape Design Plan
- \_\_\_ 5. Irrigation Design Plan
- \_\_\_ 6. Irrigation Schedule
- \_\_\_ 7. Maintenance Schedule

- 8. Landscape Irrigation Audit Schedule
- 9. Grading Design Plan
- 10. Soil Analysis

**Description of Project**

(Briefly describe the planning and design actions that are intended to achieve conservation and efficiency in water use.)

Date: \_\_\_\_\_ Prepared By: \_\_\_\_\_

**EXHIBIT "B" SAMPLE CERTIFICATE OF SUBSTANTIAL COMPLETION**

---

Project Site/Number: \_\_\_\_\_

Project Location: \_\_\_\_\_

Preliminary Project Documentation Submitted (Check indicating submittal)

- 1. Maximum Applied Water Allowance:  
 (gallons or cubic feet per year)
- 2. Estimated Applied Water Use:  
 (gallons or cubic feet/year)
- \*2a. Estimated Amount of Water Expected from Effective Precipitation:  
 (gallons of cubic feet/year)
- 3. Estimated Total Water Use:  
 (gallons of cubic feet/year)

NOTE: \*If the design assumes that a part of the Estimated Total Water Use will be provided by precipitation, the Effective Precipitation Disclosure Statement shall be completed and submitted. The estimated Amount of Water Expected from Effective Precipitation shall not exceed 25 percent of the local annual mean precipitation (average rainfall).

- 4. Landscape Design Plan
- 5. Irrigation Design Plan
- 6. Irrigation Schedules
- 7. Maintenance Schedule
- 8. Landscape Irrigation Audit Schedule
- 9. Grading Design Plan
- 10. Soil Analysis

Post-Installation Inspection: (Check indicating substantial completion)

- A. Plants installed as specified
- B. Irrigation system installed as designed
  - B.  dual distribution system for recycled water
  - B.  minimal run off or overspray
- C. Landscape irrigation Audit performed

Project submittal package and a copy of this certification has been provided to owner/manager and local water agency.

Comments:

---

I/we certify that work has been installed in accordance with the contract documents.

\_\_\_\_\_  
Contractor

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
License Number

I/we certify that based upon periodic site observations, the work has been substantially completed in accordance with the Water Efficient Landscape Ordinance and that the landscape planting and irrigation installation conform with the approved plans and specifications.

\_\_\_\_\_  
 Landscape Architect Signature  
 or Irrigation Designer/Consultant  
 or Licensed or Certified Professional in a Related Field

\_\_\_\_\_  
 Date State License Number

I/we certify that I/we have received all of the contract documents and that it is our responsibility to see that the project is maintained in accordance with the contract documents.

\_\_\_\_\_  
 Owner Signature

\_\_\_\_\_  
 Date

**EXHIBIT "C" SAMPLE EFFECTIVE PRECIPITATION DISCLOSURE STATEMENT**

I certify that I have informed the project owner and developer that this project depends on \_\_\_\_\_ (gallons or cubic feet) of effective precipitation per year. This represents \_\_\_\_\_ percent of the local mean precipitation of \_\_\_\_\_ inches per year.

I have based my assumptions about the amount of precipitation that is effective upon:

I certify that I have informed the project owner and developer that in times of drought, there may not be enough water available to keep the entire landscape alive.

\_\_\_\_\_  
 Licensed or Certified Landscape Professional

I certify that I have been informed by the licensed or certified landscape professional that this project depends upon \_\_\_\_\_ (gallons or cubic feet) of effective precipitation per year. This represents \_\_\_\_\_ percent of the local mean precipitation of \_\_\_\_\_ inches per year.

I certify that I have been informed that in times of drought, there may not be enough water available to keep the entire landscape alive.

\_\_\_\_\_  
 Owner Developer

**EXHIBIT "D" REFERENCE EVAPOTRANSPIRATION**

(In inches—Historical Data, extrapolated from 12-month Normal Year ETo Maps and U.C. publication 21426)

**SAN BERNARDINO COUNTY**

City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann ETo.
Baker	2.7	3.9	6.1	8.3	10.4	11.8	12.2	11.0	8.9	6.1	3.3	2.1	86.6
Barstow	2.6	3.6	5.7	7.9	10.1	11.6	12.0	10.4	8.6	5.7	3.3	2.1	83.6
Chino	2.1	2.9	3.9	4.5	5.7	6.5	7.3	7.1	5.9	4.2	2.6	2.0	54.6
Crestline	1.5	1.9	3.3	4.4	5.5	6.6	7.8	7.1	5.4	3.5	2.2	1.6	50.8
Needles	3.2	4.2	6.6	8.9	11.0	12.4	12.8	11.0	8.9	6.6	4.0	2.7	92.1
Lucerne Valley	2.2	2.9	5.1	6.5	9.2	11.0	11.4	9.9	7.4	5.0	3.0	1.8	75.3

San Bernardino	2.0	2.7	3.8	4.6	5.7	6.9	7.9	7.4	5.9	4.2	2.6	2.0	55.6
29 Palms	2.6	3.6	5.9	7.9	10.1	11.2	11.2	10.3	8.6	5.9	3.4	2.2	82.9
Victorville	2.3	3.1	4.9	6.7	9.3	10.0	11.2	9.8	7.4	5.1	2.8	1.8	74.6

---

View the [mobile version](#).

# Attachment 2: Adoption Resolution