

## **SECTION 11 – CONSERVATION AND DEMAND MANAGEMENT**

### 11.1 Introduction

Historically low precipitation for several years has significantly reduced the amount of water available through natural recharge into the groundwater aquifer. This has stressed the Kyle Canyon water system infrastructure and its ability to meet water demands. Given the current situation reducing Kyle Canyon’s vulnerability to service interruptions and/or water shortages will require a sustained water conservation effort by all service customers.

These Service Rules serve as an enforceable mechanism to reduce the impacts of drought and high water demands on the Kyle Canyon water system. These impacts contribute to significant system reliability concerns.

### 11.2 Drought and Water Supply Conditions

On June 17, 2003, the KCWD adopted the “Kyle Canyon Water Management Plan” to address drought and water supply conditions in Kyle Canyon. These Service Rules have been revised to implement the “Kyle Canyon Water Management Plan”.

Drought occurs when existing water supplies cannot meet established demands for a period of time. Communities can also induce or aggravate drought conditions through high water consumption or inefficient water use.

Water conservation is necessary to manage demands on the Kyle Canyon water system and its groundwater wells. For the purpose of demand management, four stages, or Operating Conditions shall apply:

- a. Sustainable
- b. Concerned
- c. Critical
- d. Emergency

The LVVWD, as agent for the KCWD, by and through its designated staff, will continually monitor the effectiveness of the water management measures during the year and revisit its operating condition declarations to reflect the status of the water resource environment. The LVVWD by and through its designated staff, may consider several factors in making an operating condition determination, including but not limited to, anticipated or actual higher demands for water, system failure or water quality issues.

The following chart defines the four Operating Conditions, the triggers for elevating operating conditions, and the required customer response to address Sustainable, Concerned, Critical, and Emergency Operating Conditions.

Operating Conditions Table		
Condition	Trigger	customer Response
Sustainable	Water supplies are being used at a rate that does not exceed the well’s ability to naturally recharge.	Water supplies are sufficient to meet demands.
Concerned	Water Supplies are being used at a rate consistent with the well’s ability to naturally recharge.  Water levels in one or more of the groundwater wells fall below:  Echo 3: 90 ft. from surface Echo 4: 170 ft. from surface Echo 5: 120 ft. from surface Rainbow: 145 ft. from surface	Use water to meet all indoor demands and reduce outdoor demands.
Critical	Water supplies are being depleted at a rate higher than that the well naturally recharges.  Water levels in one or more of the groundwater wells fall below:  Echo 3: 110 ft. from surface Echo 4: 230 ft. from surface Echo 5: 140 ft. from surface Rainbow: 165 ft. from surface	Water is available to meet all indoor demands if outdoor demands are significantly reduced.  Indicates a high or imminent potential for supply shortages and/or well / infrastructure failure.
Emergency	A well/infrastructure failure has occurred, or water resources are not adequate to meet demands	Expect service interruptions, poor water quality and/or water shortages.
<p>Note: The trigger levels cited in this section are intended to serve as a guide for designated staff of the LVVWD. Actual operating condition declarations may vary from these levels based on static or dynamic levels, impact of spring runoff, seasonality, or other factors deemed important by operational staff. Other factors may include, but are not limited to, anticipated or actual higher demands for water, operational flexibility, or water quality concerns.</p>		

11.3 Notification of Operating Conditions

When a Concerned, Critical, or Emergency Operating Condition is declared, the applicable sections of these Service Rules shall take effect. Official public notice shall be provided by way of phone calls, direct mailed correspondence, visible signage, e-mail, or any combination thereof. This notice shall serve as official notification to customers of the Operating Condition and its subsequent effects on KCWD Service Rules and procedures.

11.4 Water Waste Enforcement

As a condition of service, customers of the KCWD must use water delivered through the KCWD’s water system in a manner that promotes efficiency and avoids waste.

11.5 Water Waste Prohibited

- a. Water waste shall include, but not be limited to allowing water provided by the KCWD to flow or spray off the parcel for that the water was provided. Rule violations may result from, but are not limited to:
  - 1. The operation of landscape watering systems

2. Malfunctioning device or supply line, where the customer or their agent has known of the problem for more than 48 hours
3. Washing vehicles, equipment, driveways, parking lots, sidewalks, streets, or other surfaces or objects where water is allowed to flow off the parcel for a continuous period of five minutes or greater
4. Using spray irrigation (sprinklers) between the hours of 11:00 a.m. and 7:00 p.m. from May 1 through September 30 each year
5. Under an Operating Condition declaration, non-compliance with regulations relating to watering assignments shall be considered water waste

b. Exceptions

The following shall not be considered wasting water:

1. Water waste generated as an inherent outcome of water used to abate a health or safety hazard where the proper application of water is the most appropriate and practical technology, or water used to reasonably meet the provisions of federal, state, or local law.
2. Spray irrigation used at any time of day, during any month, to sustain plantings less than 30 days old. The exemption does not however, allow water to spray or flow off the parcel.
3. Supervised testing or maintenance of a system to repair, adjust, or conduct a performance assessment. Both the operation of spray irrigation and the generation of spray or flow from the parcel shall be exempt by this provision, if no reasonable alternative exists.

c. Violations

Under Concerned and Critical Operation Conditions and upon the first observation of waste, the customer will be notified and allowed a prescribed period of time to take corrective action. Subsequent violations will result in a formal violation notice and fee assessment.

Under Emergency Operating Conditions and upon observation of waste, the customer will be issued a formal violation notice and fee assessment. If the customer is unavailable or refuses to comply with the appropriate management measures prescribed in these Service Rules during Emergency Operating Conditions, the service may be terminated and a fee will be assessed.

Policies and procedures to support these Service Rules include:

1. Specifically define water waste and exceptions
2. Require observation and documentation of water waste by a representative of the KCWD
3. Require notification to the customer explaining the KCWD's policy prior to issuance of a violation during all operating conditions except Emergency. During the Emergency Operating Stages, the KCWD may terminate service and/or issue a violation without prior notice
4. Provide a mechanism by that a customer may protest the finding of violation;
5. May allow a customer to receive additional time to pursue corrective action;
6. Provide educational and/or incentive programs to assist customers to abate water waste.

d. Administrative Fees

Customers issued a violation notice as defined by the KCWD shall be assessed a fee according to the listed schedule. Violation levels shall be based upon violation history for the preceding 36 months.

Sustainable, Concerned, and Critical Schedule					
Size	1st Violation	2nd Violation	3rd Violation	4th Violation	5th+ Violation
1” and Less	\$100	\$100	\$100	\$160	\$ 320
Over 1” but less than 3”	\$120	\$140	\$160	\$320	\$ 640
3” and over	\$140	\$160	\$320	\$640	\$1,280

Emergency Schedule					
Size	1st Violation	2nd Violation	3rd Violation	4th Violation	5th+ Violation
1” and Less	\$120	\$140	\$160	\$200	\$ 400
Over 1” but less than 3”	\$140	\$160	\$180	\$400	\$ 800
3” and over	\$160	\$200	\$400	\$800	\$1,600

11.6 Water Efficiency and Conservation Codes

All customers of the KCWD are expected to comply with all applicable water efficiency codes. The LVVWD, as agent for the KCWD, may reject the application for, rescind, or terminate water service to any parcel or use determined to be in violation of applicable codes or standards that are directly or indirectly intended to conserve or protect the waters of the KCWD.

11.7 Demand Management

a. Spray Irrigation Restrictions

As determined by Operating Conditions, all customers will comply with the irrigation watering restrictions.

1. During all Operating Stages, it shall be considered water waste to spray irrigate outdoor vegetation between the hours of 11:00 a.m. and 7:00 p.m. between May 1 and September 30 of each calendar year.
2. During Concerned, Critical, and Emergency Operating Conditions watering days are restricted. It shall be considered water waste to spray irrigate outdoor irrigation in variance with the following table:

Spray Irrigation Watering Restrictions				
Time of Year	Sustainable	Concerned	Critical	Emergency
Spring May – June	7 p.m. – 11 a.m.	1 Day Per Week	1 Day Per Week	All Irrigation is Prohibited
Summer July – August	7 p.m. – 11 a.m.	2 Days Per Week	1 Day Per Week	All Irrigation is Prohibited
Fall September – 1st freeze	7 p.m. – 11 a.m.	1 Day Per Week	1 Day Per Week	All Irrigation is Prohibited
Winter 1st Freeze - April	Spray Irrigation is Prohibited	Spray Irrigation is Prohibited	Spray Irrigation is Prohibited	All Irrigation is Prohibited

b. Watering Schedules

For the purpose of managing the water distribution system, specific watering days and/or schedules will be assigned by the KCWD. Affected water users will be provided notification by way of phone calls, direct mailed correspondence, visible signage, e-mail, or any combination thereof. This notice shall serve as official notification to customers of the Operating Condition and its subsequent effects on KCWD Service Rules and procedures.

c. Hand Watering Restrictions

As determined by Operating Conditions, all customers will comply with the hand watering restrictions in accordance with the following table:

Hand Watering Restrictions				
Time of Year	Sustainable	Concerned	Critical	Emergency
Hand Watering	Permitted	Permitted Monday – Friday and Saturday or Sunday	Permitted Monday – Friday and Saturday or Sunday	All Irrigation is Prohibited

d. Other Outdoor Water Use Restrictions

1. Surface, Building, and Equipment Washing (excluding motor vehicles)

During Critical and Emergency Operating Conditions, surface, building, and equipment washing is prohibited.

2. Personal Vehicle Washing

Under Concerned Operating Conditions, personal vehicles may be washed upon-residential properties one time per week with a leak free hose equipped with a positive shut-off nozzle and where water does not flow off of the parcel for a continuous period of five minutes or greater.

Under Critical and Emergency Operating Conditions personal vehicle washing is prohibited.

e. Watering Timers for Irrigation Systems

During Sustainable, Concerned, and Critical Operating Conditions irrigation systems, including subsurface and hose attachment must be equipped with a watering timer.

1. Watering timers should not be set to exceed 15 minutes per area.
2. Watering timers may be reset in 15-minute increments per area.
3. Watering duration may not exceed a total of 30 minutes per area, per assigned watering day.