

Summit West Mutual Water Company
Water Conservation Program
Revision 1

A. Introduction

This water conservation program serves as a guide for the Summit West Mutual Water Company (Summit West) in its administration of water resources for the benefit of the users/members of the water mutual. It will be amended from time-to-time as conditions and circumstances arise.

B. Non-Emergency Conditions

In the routine operation (i.e., non-emergency) of Summit West the Board of Directors and the Maintenance Manager's functions include the monitoring of the system for both water source, water quality, and water use. The water source for Summit West is San Jose Water Company via the Montevina Pipeline. Water supply is governed by San Jose Water Company filings with the California Public Utility Commission. Supply is based on an average daily household use of 400 gallons per day (gphpd) with a peaking factor of 1.8 to account for seasonal uses (e.g., summer) that exceed the average. The 400 gphpd and the 1.8 peaking factor are values that can be accommodated by the Montevina Pipeline, have been approved by the County of Santa Cruz, and have been allocated by San Jose Water Company to Summit West for up to 174 total active connections.

Water use varies from household to household depending on many factors. Under routine or normal conditions there are minimal limitations or restrictions on consumption although water conservation is encouraged. The current rate structure for Summit West includes 500 cubic feet of water in the base rate with each additional 100 cubic feet currently costing \$5.00, a premium over the current purchase price of water. Based on monthly residential meter readings, Summit West will communicate with excess users and if necessary restrict water to them even under non-emergency conditions. "Excess" usage is defined as more than 3,000 cubic feet per month. Summit West shall send to all current and additional active connections the water notice in Appendix A that defines the restrictions and suggestions on water usage.

From time to time (although rare) there will be localized water shortage or outage conditions due to equipment or line failure or similar cause. These are typically short-term. If the correction will take longer than 24-hours, the affected users will be notified by telephone.

Summit West operations personnel will routinely interface with the water supplier, San Jose Water Company, to insure that the system needs are conveyed. Tank levels and system flows will be monitored for adequacy and adjusted accordingly.

C. Drought/Emergency Contingency

Drought/emergency contingency might better be described as emergency preparedness since a variety of conditions may occur that limit the availability of sufficient good quality water to meet existing demands. While drought may limit the supply of water available for use, a water main break, major distribution system repairs or contamination of the supply can also severely limit the amount of water available to meet Summit West's needs.

Drought/emergency contingency differs from long-term water use efficiency in the intensity and timing of the appropriate actions needed to manage and conserve water. These actions are often spurred because persistent water shortage conditions have reduced supplies to the point where demands are likely to go unmet. Proper contingency planning forestalls the need to take drastic action to curtail use and allows Summit West to manage and balance its supplies and demand. The level of activity and the desired outcome during water shortage conditions are obviously more pronounced than under normal situations. Additionally, drought/emergency contingency efforts must occur immediately to enact short-term relief on the water supply system. As a matter of policy, Summit West encourages water conservation even in time of ample supply.

Every drought/emergency contingency plan will be set up in stages, each one more stringent than the one before it. Triggering mechanisms are identified to signal the start of a given stage and specific goals will be defined as the desired outcome for each stage. Finally, specific conservation practices in the areas of education, management and regulation will be developed under each stage.

Triggers

Triggers are the signals that water shortage conditions have reached certain stages or levels. They act as the signal to begin implementation of the appropriate stage. Triggers may be related to supply conditions or demand levels. A given stage must have more than one trigger to confirm that conditions are worsening. Summit West will enact the appropriate stage whenever the agreed upon set of triggers is reached. Delay in action may lead to a major disruption of the water supply system at a later time. The Summit West Board of Directors in conjunction with the Maintenance Manager has the responsibility for implementing water conservation plans. The following triggers are listed as examples for Summit West to use:

1. Notification of supply/delivery problems by San Jose Water Company or related sources of information. This would typically be a notification that San Jose Water Company was or may be unable to fully supply the

Summit West system with its allocated water volumes based on daily, weekly, monthly or annual demands.

2. Notification of supply or delivery problems by the Summit West Maintenance Manager and Staff.
3. High daily user demand levels beyond planning or historic levels.
4. A substantive reduction in volume of water in system storage.
5. A reduction in system delivery pressure to less than 5 psig.
6. Failure to meet mandated water standards.
7. Emergency conditions related to water quality.

Stages

Usually three to four stages are appropriate to implement drought/emergency contingency practices. The stepwise approach of using stages is appropriate because the impact of conservation practices of a moderate stage may preclude the need for Summit West to enact more severe conservation practices at a subsequent stage. Furthermore, the successful implementation of a drought/emergency contingency plan depends on the education and cooperation of the system users. The users will support actions to curtail water use if they are aware of worsening conditions ahead of time, allowing them to make the transition to the type of water use habits that are necessary for Summit West to reach its goals. The first three stages listed below are appropriate for expected water conservation circumstances with an acknowledgement of the rare possibility of a water quality emergency. The fourth stage is shown for possible use by Summit West in an extreme water shortage:

1. *Water Watch.* Conditions indicate that the probability of a water shortage is rising and steps should be taken to inform water users and ask for voluntary reductions in water use. No serious threat to water supplies is eminent but Summit West is watching the situation.
2. *Water Warning.* Water shortage conditions are present and water supplies are starting to decline. Additional curtailment of use is suggested, especially restrictions on nonessential uses. The water system is able to meet demands as they exist, but lowering the demands may extend Summit West's ability to meet future demands without significant disruption.
3. *Water Emergency.* Severe water shortage conditions are present and supplies are becoming limited. Mandatory restrictions of use, especially

outdoor use, are in place. System depletion is becoming a possibility if conditions do not improve or demands do not decline. An emergency also will be declared when water quality does not meet standards

4. *Rationing*. This applies to circumstances where the available water supply does not permit even routine usage (e.g., under 400 gallons per household per day). Under this rare condition, each user will be allocated a specific amount of water or will be limited in ability to draw water through the application of flow-restricting devices. To be effective rationing will be followed by strict enforcement (e.g., more frequent meter reading) and penalties, usually monetary. In the extreme, service disconnection may be employed. Rationing allocation policies can take several forms:
 - a. Percentage of normal use. Water may be used up to a set percentage of the amount used in previous months or years.
 - b. Set per capita or per household amounts. Water may be used up to an amount which reflects a set per capita or per household amount on a monthly basis.

Summit West will weigh the equity of the above approaches for rationing as they pertain to previous usage, family sizes and difficulty in administration. A drought/emergency contingency plan will have a goal of avoiding this fourth stage, at all reasonable costs, which in turn means strong efforts in the earlier stages.

Goals

Each stage will have a goal associated with it which describes the desired outcome of the activity under that stage. The goals provide a guideline to determine when to select appropriate responses, as well as a measure of the achievements under that stage. Goals will be specifically described and targeted to increased water user awareness, reduction in overall demand, reductions in peak demands and maintaining water supplies at given levels. Goals will be established by the Summit West Board of Directors whenever a Trigger has initiated a Stage. The following examples illustrate specific goals.

1. The goal of the Water Watch stage is to increase awareness of the possibility of a water shortage among water users and to ask for voluntary efforts to conserve water.
2. Under a declaration of a Water Watch Summit West shall set usage-reduction goals (e.g., 10% target reduction in daily usage per household).
3. Under a declaration of a Water Watch Summit West shall begin planning for future reductions and for future mandatory actions to be taken should the water warning stage be reached.

Similar goals would be set by the Summit West Board of Directors if/as increasing Stages were reached. These goals could include one or more of the following:

1. Increased user notification of water situation and suggestions for water conservation. This may include distribution of water conservation literature and water-saving devices such as shower flow restrictors and toilet dams.
2. Identification of large water users and subsequent communications with them on reduction goals and methods.
3. Rate changes to substantially increase the cost of water use beyond established conservation goals.
4. Use of flow-restricting devices for significant over-users.
5. Establishment of non-essential water use schedules (i.e., exterior watering).
6. Rationing on a per-capita or per-household basis.
7. Water hauling to provide additional supply.
8. Issuing Boil Orders. (water quality/very low pressure issues)

The selection of goals can only be done after an assessment of the specifics associated with the water emergency.

Leakage Monitoring

Summit West has a routine leakage monitoring program. Select pressure zones on the Summit West system have been equipped with flow meters that are read periodically and compared to normal usages. When the system operator notes an abnormally high zone use it triggers an investigation into the cause. Examples of causes are: broken or leaking system line, broken or leaking line on the user side of the residence meter, or unusual use by a customer (e.g., filling of a swimming pool). System problems will be repaired whereas user breaks/leaks will result in a shutdown of service at the meter and a notification of the user. Unusually high uses will be noted for future notification should they become routine. In a similar fashion, several main storage tanks are alarmed and equipped with pager-dialers in the event of low water level. System operators will respond to alarms and remedy the cause. Diagnosing tank level alarms is often done by reading the pressure zone meters.

Under water insufficiency times the leakage monitoring program will continue. At the discretion of the Maintenance Manager and/or the Board of Directors, the monitoring

frequency may be increased to detect any potential leaks or abuses earlier than under routine conditions.

Communications

The Summit West Board of Directors shall communicate with the users using one or more of the following:

1. Notices included in the monthly billings.
2. Notices posted on the Summit West web site, www.summitwest.org.
3. Special notices sent by mail to alert users. Appendix B is an example of a special notice to inform users of a supply reduction.
4. Posted notices along roads used by users.
5. Telephonic notices.

Regulatory Interface

The Summit West Board of Directors shall notify the Santa Cruz County Health Services Agency – Environmental Health (EH) of any Stage beyond normal operations. EH will be given a copy of the stage-specific goals/plans for water management. The Board will continue to update EH of the status of the system as the plan is implemented.

Term of Plan

A water stage and its companion plan shall remain in effect until the Summit West Board of Directors declares it terminated or reduced. All water users and Santa Cruz County Environmental Health shall be notified of the change in status in a timely manner.

Records

Summit West shall keep records of the results of any water conservation or emergency situation. The Board shall review those records and make adjustments to the associated plan. Lessons learned shall be incorporated into future plans.

This Water Conservation Program has been adopted by vote of the Summit West Mutual Water Company Board of Director on _____, 2008.

For the Board of Directors:

Robert. Jones, President

Appendix A

Sample Use Notification

To: All users/Members of the Summit West Mutual Water Company

From: Summit West Board of Directors/System Operators

Subject: Water Supply Policies and Guidelines

This notice from the Summit West Board of Directors is intended to clarify certain aspects of the water supplied by your water company.

Where Does The Water Come From?

The water originates at San Jose Water Company's Montevina Treatment Plant near Los Gatos and is transmitted to Holy City via the Montevina Pipeline. This pipeline serves much of the Summit Road/Hy 17 area. Summit West's water allocation is passed through the Redwood Estates system, down Summit Road in a pipeline owned by San Jose Water Company, down upper Hutchinson Road in a pipeline owned by the Ridge Mutual Water Company, and enters the Summit West system at Old Ranch and Hutchinson Roads. It flows to our receiving tank at the Upper Oak Flat Road via the new Hutchinson Road pipeline. From the Upper Oak Flat tank site the water is distributed to the various tanks and service connections throughout the system.

Are There Any Limitations On Water Use?

Yes. Water supplied by Summit West is for domestic use. Agricultural watering other than household plantings is not allowed. If a user/member has a swimming pool it is requested that pool filling be done using trucked water. A large withdrawal from the system to fill a pool can result in a drawdown of stored supplies and a subsequent temporary shortage to the neighboring residents.

The Summit West system does not supply fire flows or pressures. Although there are water connections around the system that are available to fire fighters, none of these are represented as "hydrants" capable of meeting standards for fire protection.

Excess use, defined as more than 3,000 cubic feet per month, may result in flow restrictions and other penalties to the household. Everyone has a responsibility to minimize water use.

How Much Water Is Available?

Under non-emergency conditions there is no set limit on water use as long as it is under the 3,000 cubic feet per month limit. The PUC filings by San Jose Water Company (our water supplier) only guarantees Summit West an average of 400 gallons per household per day (gphpd) with the added capability of increasing the flow to 720 gphpd for those peak use times, usually on the hottest days of the summer. The filings also state that San Jose Water Company will supply us with our water needs as long as the supplies are adequate. However, it is important to note that use in excess of 400 gphpd results in a price penalty for our purchased water so it is important for all users to use water conservation practices as much as possible.

Where Can I Get Water Conservation Information?

Most mountain residents are already aware of the measures that result in water conservation. To supplement this Summit West does several things. First, each billing contains tips on water conservation. Second, the Summit West web page, www.summitwest.org has a list of things that can be done to preserve this valuable resource. Finally, the web page has several links to other sources of water conservation information. This information will be periodically updated.

How Can I Get The Status Of The Water Supply?

If there is a change in water supply status from routine to non-routine, Summit West will notify all users. The web page will be the principal source of information but we may use other means such as post or telephone depending on the urgency of the situation. If there is a non-routine situation in a specific part of the system the notice may be given to the affected parties.

How Can I Get More Information On Summit West?

You can e-mail questions to Summit West through info@summitwest.org or you can go to the web page for contact telephone numbers for both billing and emergency questions. These numbers are also on the monthly statement.

This is our water company and we all have a responsibility to make it the best in the Summit Area. We think our efforts are working. Thank you for your continued cooperation.

Appendix B

Sample Reduced Consumption Notification

To: All Users/Members of the Summit West Mutual Water Company

From: Summit West Board of Directors/System Operators

Subject: Water Consumption Reduction Notice

This notice is to inform all users of the Summit West Mutual Water Company that the water supply has been reduced due to _____. This supply reduction means that it will be necessary to restrict household usage to _____ gallons per household per day. We expect this shortage to last for _____.

At this time we are requesting voluntary reductions in usage. If this is unsuccessful we will implement monetary penalties based on usage. In addition, for abusive-use situations we may install flow restriction devices to physically limit the delivery of water or permit flow for predetermined times.

If you want to monitor your use:

1. Note the time of day and read your meter. The meter reads **cubic feet** and is a cumulative reading. Select a day(s) when your use is maximum.
2. At the same time one (24 hours) or more days later, take a second meter reading.
3. Subtract the first reading from the second. This is the amount of water used over the reading period (one or more days).
4. Multiply the meter difference by 7.5. This will give you the number of **gallons** used over that period. If you took a one-day reading then this is your daily use. If you read the meter over a longer time then you have to divide by the number of days to obtain the daily usage.

The Summit West Board and operators are working on ways to remedy this water shortage. You can do your part by following the conservation guidelines on our web page, www.summitwest.org. Together we can get through this situation.