



WATER SHORTAGE RESPONSE PLAN

Las Virgenes Municipal Water District

LVMWD REPORT No. 2411.00

June 24, 2008

INTRODUCTION

The purpose of this Water Shortage Response Plan is to apprise Las Virgenes Municipal Water District (LVMWD) customers and interested parties of: (1) the current regional water supply shortage situation, (2) the policy principles by which LVMWD will implement and administer measures to address water shortage, (3) the conservation measures LVMWD will undertake to ensure adequate water supplies to its customers, and (4) the process by which customers may appeal exceptional cases of hardship imposed by these conservation measures.

1. WATER SUPPLY SITUATION

A combination of low snowpack levels in the Sierras, a record eight year drought in the Colorado River Basin, significantly below normal rainfalls for the past two years, reduced levels of storage in our reservoirs, and restrictions on water delivery through the Sacramento-San Joaquin River Delta for the State Water Project (SWP) are all contributing to a severe water supply shortage throughout California.

- The California Department of Water Resource's final snow survey of 2008 showed snowpack water content at only 67 percent of normal and the runoff forecast at only 55 percent of normal. As conditions continue to worsen across California, it underscores the state's need for infrastructure improvements to capture excess water in wet years to use in dry years like this one.
- Statewide rainfall has been below normal in 2007 and 2008, with many Southern California communities receiving only 20 percent of normal rainfall in 2007, and Northern California this year experiencing the driest spring on record with most communities receiving less than 20 percent of normal rainfall from March through May.
- California is experiencing critically dry water conditions in the Sacramento and San Joaquin River basins and the statewide runoff forecast for 2008 is estimated to be 41 percent below average.
- Water storage in many of the state's major reservoirs is far below normal including Lake Oroville, which supplies the State Water Project, at 50 percent of capacity, Lake Shasta at 61 percent of capacity and Folsom Lake at 63 percent of capacity.
- The Colorado River Basin has just experienced a record eight-year drought resulting in current reservoir storage throughout the river system reduced to just over 50 percent of total storage capacity.
- Climate change will increasingly impact California's hydrology and is expected to reduce snowpack, alter the timing of runoff and increase the intensity and frequency of droughts in the western United States.
- Diversions from the Sacramento-San Joaquin River Delta for the State Water Project (SWP) and federal Central Valley Project (CVP) are being greatly restricted due to various factors including federal court actions to protect fish species, resulting in estimated SWP deliveries of only 35 percent, and CVP deliveries of only 40 percent, of local agencies' requested amounts for 2008.

Governor's Statewide Drought Declaration – On June 4, 2008, as a result of these severe supply conditions, the Governor of the State of California proclaimed a statewide drought and issued an Executive Order directing immediate state action to deal with the crisis. The Executive Order encourages local water districts and agencies to promote water conservation. They are encouraged to work cooperatively on the regional and state level to take aggressive, immediate action to reduce water consumption locally and regionally for the remainder of 2008 and prepare for potential worsening water conditions in 2009.

Metropolitan Water District Water Supply Alert – On June 10, 2008 the Metropolitan Water District of Southern California (MWD) Board of Directors followed the Governor's drought declaration, with a regional Condition 2 Water Supply Alert to help preserve the region's water storage reserves.

MWD's Water Supply Alert calls on local public water agencies and retailers to achieve extraordinary conservation by adopting and enforcing drought ordinances, and accelerating public outreach and messaging. According to MWD's Alert, the measures that could be incorporated into local drought ordinances include restrictions on the hours of watering outdoors, where up to 70 percent of water is used; prohibitions on landscape irrigation runoff; tiered rate structures that promote conservation; provisions for water-efficient landscapes in new construction and landscape retrofits; and hotlines and other mechanisms for the public to report wasteful water practices.

2. POLICY PRINCIPLES

In response to the urgent regional water supply situation, LVMWD will implement various conservation measures to ensure adequate supplies for essential water demands. The following eight policy principles will guide LVMWD's implementation of these measures:

- a) Incentives and appropriate water use practices shall be utilized as needed to accomplish goals, limiting financial impacts and/or shut-offs to those customers who fail to meet conservation targets.
- b) Customers who meet goals should not pay more for their water.
- c) Conservation goals should relate to the MWD's Water Supply Allocation Plan and wholesale rate structures.
- d) Development that complies with conservation codes and standards should not be restricted.
- e) An appeal process shall be available to all customers.
- f) The Las Virgenes Reservoir shall be used appropriately to support water supply.
- g) Policies and procedures shall be clear and logical, make sense to customers, and relate clearly and directly to conservation targets.
- h) Water allocations shall be based on needs that are basic to all, and customers' demonstrated level of efficiency.

3. CONSERVATION MEASURES

In response to our urgent statewide and regional water supply shortage, LVMWD will:

- Communicate timely water supply situation, conservation, and compliance messages to all customers, residential homeowners associations, business chambers, inter-governmental bodies, essential facilities (schools, hospitals, fire), and other stakeholders.
- Implement water conservation measures in accordance with LVMWD rules and regulations.
- Develop further ordinances and policies as necessary to ensure conservation.
- Develop and implement individual customer water budgets to ensure proper allocation of water supplies.

Each of the above measures will be implemented as appropriate to ensure conservation levels commensurate with the severity of the water supply situation.

Communications & Outreach – Through the use of the following channels and media, LVMWD staff will ensure timely and appropriate communications with the LVMWD Board of Directors, customers, residential homeowners associations, business chambers, inter-governmental bodies, essential facilities (schools, hospitals, fire), and other stakeholders.

- Public water conservation forums hosted at LVMWD headquarters and off-site locations.
- Attendance and agenda presentation at local city council meetings.
- Attendance and agenda presentation at home-owners association, business chamber, and city council meetings.
- Direct mailings and bill inserts to customers and account holders.
- Press releases.
- LVMWD publications, e.g., the *Current Flow*.
- Updated posting of issues and information on LVMWD website.
- Advertisements in local publications and cable channels.
- Cards, table tents, door hangers and other leave-behind reminders.

Conservation Measures – LVMWD supports customer conservation efforts through education programs that include water-efficient home gardening workshops, facility tours, community event conservation outreach, school programs, printed materials, and free on-site water use surveys. The District also offers rebate programs for qualifying water-efficient devices that are purchased and installed in customer homes. Eligible items include certain water-efficient clothes washers, toilets, weather-based irrigation controllers and lawn sprinkler heads.

Ordinances – In addition to programmatic, voluntary conservation measures, it may become necessary to implement mandatory compliance measures to ensure conservation.

If this occurs, LVMWD may implement one or more of the following measures, in accordance with approved ordinances.

- Limit the times and days of outdoor irrigation.
- Restrict exterior washing, and ornamental or recreational uses of water.
- Require restaurants to serve water only upon request.
- Require hotels to give guests the option of laundering linens and towels during multiple day stays.

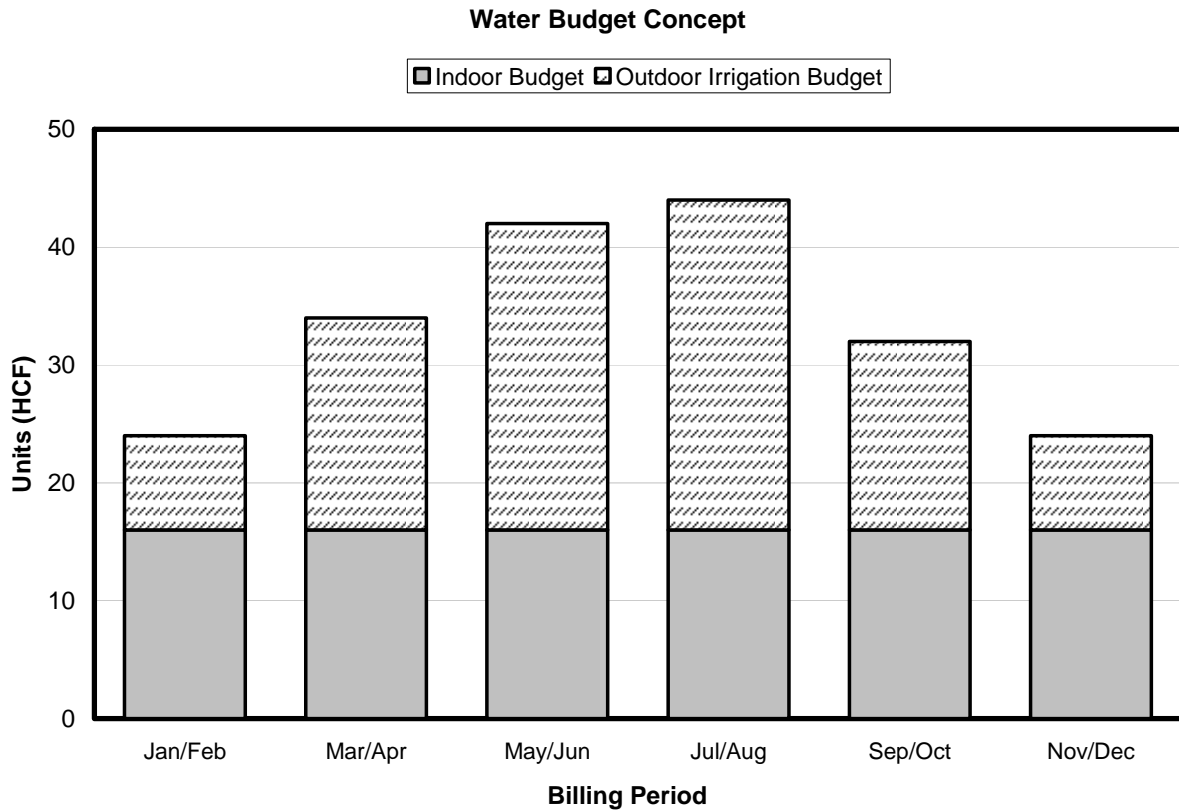
The Board of Directors of LVMWD may also amend existing drought ordinances, or adopt more stringent ordinances as necessary to ensure.

Water Budgets – An additional water conservation measure that may be implemented is water budgets, volumetric allotments of water based on a set indoor demand volume and weather-adjusted outdoor demand.

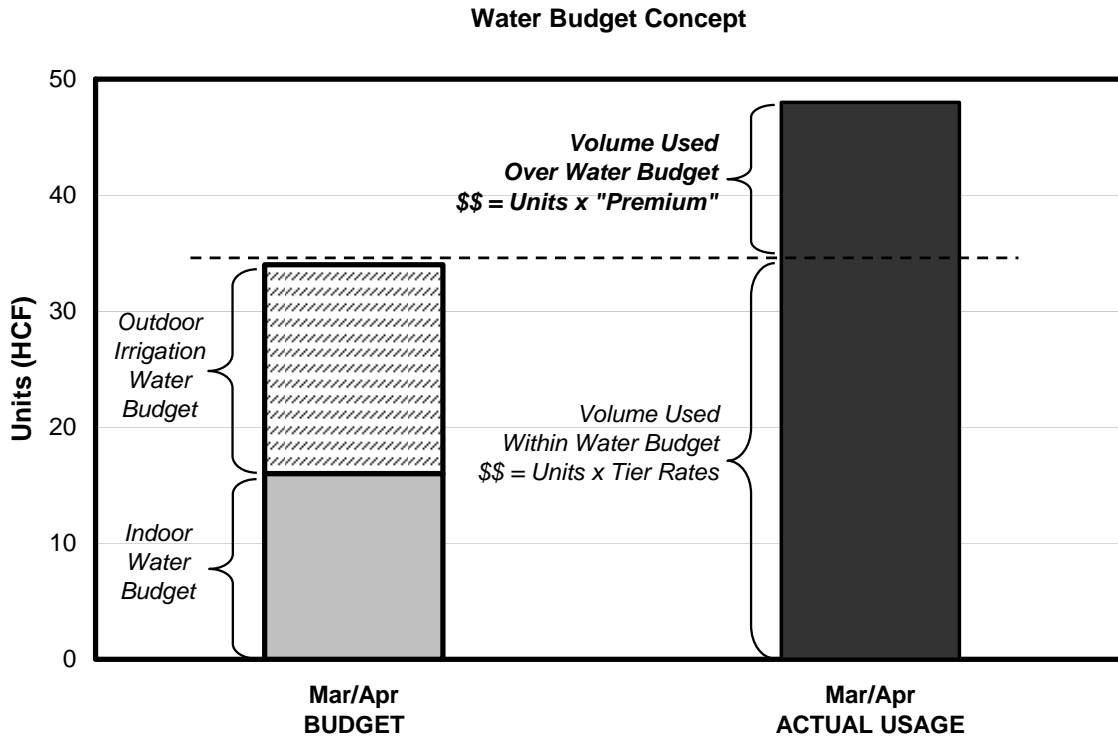
As an example, the indoor demand for single family residential customers is currently set at 16 units (HCF) of water per two month billing cycle, the minimal water necessary for indoor consumptive use (drinking, health and hygiene). Outdoor water demand is based on total irrigable area adjusted for a weather-based evapo-transpiration factor (ET).

$$\text{Water Budget} = \text{Indoor Water Requirements} + \text{Outdoor Irrigable Area} \times \text{ET Factor}$$

Accordingly, whereas the indoor budget is relatively constant, the outdoor irrigable budget will change seasonally, with water demands higher during summer months and lower during the winter. This concept is demonstrated in the chart below.



Water budgets represent reasonable demands for combined indoor and outdoor use. As such, water budgets may be used as an overlay to existing tier and rate structures to enhance water conservation. Customers who consume water within budget will pay the respective unit cost per tier. However, as demonstrated in the chart below, customers who exceed budget will be charged a premium for the incremental volume.



4. APPEALS PROCESS

As with any system for allocating community resources, exceptional individual circumstances or needs may warrant review and specific accommodations. In considering such circumstances, LVMWD will strive to balance individual needs with the community's need for adequate water and a practical system for allocation.

A customer may request relief from mandatory conservation practices by filing a written appeal with LVMWD staff. The water district may grant relief in case of hardship if all feasible means of conserving water have been exercised, including but not limited to, retrofitting non-ULF toilets with ULF toilets, installing low-flow showerheads, implementing recommended conservation measures pursuant to a district water audit, and verifying no observable runoff from the customer's premise.

Staff will review the petition for appeal and make a finding to approve or deny the appeal. Findings and recommended exceptions, if any, will be forwarded to the General Manager for approval.

The decision of the General Manager may be appealed to a water shortage committee appointed by LVMWD's Board of Directors. The committee shall review the General Manager's decision and approve or deny the petition based on the circumstances of each case. Decisions of the committee shall be final.

TERMINATION

The decision to discontinue one or more elements of this Water Shortage Response Plan in response to improved water supply outlook will be made by LVMWD Board of Directors based upon the recommendation of the General Manager.

Questions regarding this Water Shortage Response Plan should be referred to:

Las Virgenes Municipal Water District
4232 Las Virgenes Road
Calabasas, CA 91302
(818) 251-2130

Information regarding LVMWD conservation programs and rebates may be found at:

www.lvmwd.com