

WATER MANAGEMENT PROGRAM

June 2008

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The Huntington Beach Water Management Program is intended to reduce water demand to a level that matches the available water supply. It is the responsibility of the municipal water agency to assess needs, system capability and available supplies, and to provide a method to equitably share the water resources. The program will be implemented when a sustained or an emergency water shortage is imminent.

The program is presented in stages; however, the nature of the water supply shortage will determine the appropriate stage to be implemented. Anticipated shortages may allow staged programs. If the severity of the water emergency increases, stages which reduce demand more than the previous stage will be implemented. Unanticipated emergency water shortages may require immediate restrictive actions, without progressive stages.

Stage I (Shortage 10%): Involves implementing voluntary conservation measures; specific water use restrictions; regulated irrigation times; review of City facilities water use; and a coordinated public information program. In all stages, water waste is prohibited. Penalties may be assessed for noncompliance.

Stage II (Shortage 10%-20%): All of Stage I, plus additional specific use restrictions. Appropriate water use allocations and rate block structures will be determined, and a program for rationing prepared. Strict enforcement of the penalty system for violations.

Stage III (Shortage more than 20%): All of Stage II, plus a water rationing plan which includes water use allocations and increasing rates structure is put in place. Specific limitations on all nonessential water use. Restrictions to grading, hydrant use and new construction permits will be requested.

If further shortages are imminent, the water rationing plan will be accelerated. All nonessential water use, including irrigation and grading, will be prohibited. Outdoor water use will be restricted to that necessary for public health and safety.

The Water Management Program includes ongoing monitoring of the effectiveness of the imposed conservation measures and restrictions. The estimated water savings at each stage will be determined. If the demand is significantly disproportional to the anticipated supply, then the stage of conservation will be adjusted accordingly.

IMPLEMENTATION STAGES

Stage I (Less than 10%)

To be implemented if the anticipated supply of water available to the City over the foreseeable future will be 10% less than the projected normal year demand. This stage combines voluntary water use reductions and specific water use restrictions including:

All Water Users

Prohibit the washing of concrete and other hard surfaces, including driveways, walkways and parking areas except as required to maintain health or safety;

Turn off decorative fountains, ponds, lakes and pools unless a water recycling system is used;

Retrofit indoor plumbing fixtures with low-flow devices if appropriate; encourage low-water-using fixtures when replacing existing fixtures;

Check faucets, toilets, pipes, irrigation systems and meters for leaks and repair immediately;

Reduce interior and exterior uses of water whenever possible to prevent water waste;

Require automatic cut-off valves on hoses when washing vehicles or other items outside;

Encourage installation of pool and spa covers to minimize water loss due to evaporation;

Discourage draining and refilling of pools and spas unless necessary for health and safety reasons;

Prohibit the indiscriminate running of water or washing with water which is wasteful and without reasonable purpose;

Implement a water waste penalty system.

Irrigation and Outdoor Water Use

Regulate irrigation on residences, golf courses, cemeteries, government, public and commercial facilities landscape areas to include:

Schedule irrigation times between 7:00 p.m. and 9:00 a.m.

Adjust sprinklers and irrigation systems to avoid over-spray, run-off and waste;

Encourage the installation of low-water-using plants combined with hardscape materials and energy-efficient irrigation systems when installing or replacing landscapes; discourage replanting, if possible;

Do not allow water to run off landscaped areas into adjoining streets, sidewalks, parking lots or alleys;

Reduce irrigation times or frequency by 50% where possible;

Check faucets, pipes, irrigation systems and meters for leaks and repair immediately;

If outside water connections are available, require automatic cut-off valves on hoses;

Require vehicle washing be accomplished with a bucket rather than running hose to the extent possible;

Eliminate draining and refilling of decorative ponds and fountains unless necessary for health and safety reasons.

Commercial/Industrial Use/Public Agencies

Adhere to all restrictions applied to all water users, including irrigation and outdoor water use;

Make plumbing and irrigation adjustments as recommended;

Restaurants shall serve drinking water only upon request;

Review operational water use and determine possible alternatives, i.e. recirculating; automatic cut-off valves;

Prohibit water use for cleaning of hard surfaces except as necessary for health and safety reasons, or if a cleaning machine equipped to recycle water is used;

Evaluate necessity or frequency of high-water-using activities, such as window washing, exterior walls or other nonessential cleaning.

Stage II (Shortage 10% - 20%)

All of Stage I, plus:

All Water Users

Mandatory adherence to irrigation limits, street cleaning, system flushing, car washing and other requests for outdoor water use in Stage I;

Prohibit the filling of pools, spas and lakes except as necessary to maintain health and safety;

Require all ornamental fountains be turned off or not refilled;

Discourage the use of hydrants and water trucks used for grading or cleaning;

Discourage the use of water softeners and filters which increase water use.

Irrigation

A surcharge of 50% of the domestic water rate will be applied to irrigation meter water use in excess of 50% of prior years' usage;

Industrial and Commercial

Allow access to the premises to/by Utilities Division personnel to conduct internal water use audits if requested;

City and Public Agencies

Implement applicable procedures required of all water users;

Prohibit use of water trucks for washing sidewalks and watering landscaping;

Limit water use for street cleaning unless necessary for health and safety reasons;

Limit water use for sewer cleaning to necessary amounts to prevent or eliminate sanitation problems;

Reduce water system pressure during off peak hours if practical.

Stage III (Shortage 20% +)

All of Stage II, plus:

All Water Users

Mandatory compliance with all restrictions;

Mandatory compliance with water use allocations;

Irrigation of greenbelts, golf courses, cemeteries and ornamental landscaping will be prohibited;

Strict enforcement of the penalty system for all users.

City and Public Agency Water Use

Restrict water system flushing to emergency situations only;

Limit the issuance of permits for hydrants and water trucks used for grading or cleaning;

All public water uses not required for health or safety are prohibited.

City Water Use

Request the cooperation of all City Departments to control internal and external water uses;

Inspect and adjust irrigation systems at all City facilities;

Perform internal plumbing repairs in all facilities;

Eliminate the use of hoses on cement walkways unless necessary for sanitation reasons;

Establish a system at each facility to notify the proper personnel of leaks or water waste problems;

Review current water use by all facilities;

Evaluate water needs of Fire Department and Public Works Departments to ensure public health and safety, yet eliminate water waste;

Monitor all public use areas for proper water use and leak detection;

Limit all unnecessary water use, including system flushing and fire flow testing, except as necessary to protect public health and safety.

City Administrative Actions

Stage 1

Implement a public information program which may consist of: conservation packets and brochures; cable network programming; water bill inserts; local newspaper information and speaker's bureau;

Make available, upon request, water-saving bathroom kits, including shower-flow restrictors and toilet displacement bags;

Provide water conservation information and assistance to all residents upon request;

Increase response to water waste reports at public facilities and landscaped areas;

Review personnel and budgetary needs as necessary to respond to additional customer service and administrative demands to ensure a successful program;

Stage II

Implement a surcharge of 50% of the domestic water rate to irrigation meter water use in excess of 50% of comparable period 2007/08 usage;

Prepare a plan for household allocation water use limits;

Prepare increasing block rate structure for excessive use. Excessive use will be determined by the average water use for the type of dwelling, per the most current city Urban Water Management Plan;

Respond to all reports of water waste; proceed with water waste penalty implementation;

Provide additional programs as possible. Programs could water bill credits (rebates) for ultra-low flow toilet installations; a low-flow shower head replacement program; household water audits upon request;

Review staffing and budget allocations as necessary to implement additional programs and customer services responses to ensure a successful program.

Stage III

Implement the household water use allocation plan;

Implement increase block rate structure for all water use.

Reporting, Enforcement and Penalty Systems

Reporting

If misuse of water is reported at a residence or business, the Utilities Division shall investigate the address in a timely manner, usually within 24 hours.

Reports of violations should include the name and phone number of individual making report. This information will not be used except for documentation of the problem and statistical information by the Utilities Division.

The Utilities Division will keep a separate log, by service address, of investigations generated by water waste complaints.

If, through the course of daily activities, a City employee observes a violation of water use, it should be reported to the Utilities Division.

Response to Violations

Should violations of the plan be witnessed, reported or apparent to Utilities Division personnel, they shall proceed with the established investigation system.

Stage I response will be limited to public agency, irrigation meter and commercial landscaping violations.

Stage II and III will include response to all reported violations.

Investigation System

1. First Report

If personal contact with the resident can be made, the Water Representative will make a verbal request to comply with the requirements of the Program.

The customer will be provided with a copy of the appropriate pages of the Program, a water conserving tip sheet and a phone number to call if the customer has any questions about the program. The customer will be offered assistance and an explanation of the Program.

If personal contact with the resident cannot be made, a notification will be placed in a visible area on or near the primary access door whenever possible.

2. Second Report — Same Service Address

After verification through a field inspection, the customer will be sent a written notification from the Utilities Division requesting compliance. The letter shall explain the violation, and inform the customer of the penalties

for further infractions, including financial penalties, flow restriction and possible water disconnection.

3. Third Report — Same Service Address

The letter will be the final attempt to resolve the situation without penalty. It will advise that immediate water disconnection will occur should the situation be observed or reported again.

4. Fourth Report — Same Service Address

A flow restrictor will be inserted into the customer's water meter.

5. Fifth Report — Same Service Address

Water will be disconnected, and the current established penalty must be paid before service is restored.

Should the situation continue, the customer will be notified by certified letter that he is in willful violation of the ordinance, and the next occurrence of the incident will be reported to the Police Department.

PUBLIC COOPERATION

Conservation actions to cope with emergency water shortages are usually received with widespread response by the general public. The public perception that there is a need for extraordinary measures, some of which entail personal financial costs and/or inconveniences, and an understanding of the effectiveness of the prescribed actions, is essential to gaining public support and ready participation.

Consumer response to rationing programs is more predictable than to other conservation measures, and these are generally the most effective programs to achieve significant demand reduction. One of the problems with a rationing system is in accurately designing the program to achieve the reduction in demand to correlate with the available supply, while adversely impacting citizens as little as possible. Although corrections can be made to lessen the impact of a program proving to be too severe, changing programs once they are in place tends to send a message to the customers that the utility lacks resolve or understanding. For this reason, the City must carefully plan the public information program and emergency conservation actions.

The public information program should be aimed at the following five basic groups: local decision makers; governmental bodies; industries, schools businesses, homeowner's associations, and other groups asked to comply with specific use restrictions; news media; and the general public. The first objective should be providing information accurately and promptly.

It is important that the City demonstrates to the public that they are doing everything possible to minimize the shortage. Accurate information concerning supply status (reservoir and ground water levels), conservation efforts, remaining supply, and other pertinent information should be provided to all personnel involved with public information, especially to those dealing with the media.

Water Allocation Methods

The key elements of a rationing program are that the resources are shared as equitably as possible, and that customers are kept informed about the status of the shortage. Rationing decisions are expected to raise questions, and procedures to handle valid exceptions and variances need to be a part of the program.

Rationing programs are usually patterned after one of the following basic allocation plans:

- Percentage reduction
- Fixed allotment
- Seasonal allotment
- Specific use bans

A percentage reduction assigns each customer class a consumption goal as a percentage of the consumption level used in a similar billing period during the past year. Fixed allotments allow a specific amount of water to each user group based on customer type and average use for similar residential or commercial uses. The seasonal allotment is similar to the percentage reduction except that the consumption reduction goal is varied, depending on the time of year. Specific use bans prohibit water waste and are generally limited to outdoor uses and other nonessential uses. The Huntington Beach plan proposes a combination of these programs to provide guidelines for general water use allocations.

Fixed percentage reductions are easy to determine; however, this method can be perceived as inequitable because it has the effect of penalizing former water conservers, while rewarding those who had previously used large water quantities. Identical houses could receive different water allotments. To avoid this potential problem, a fixed percentage reduction will not be applied across the entire customer base. Fixed percentage is appropriate for public agencies, irrigation water use and public facilities which have a wide variety of water uses. A 10% to 50% reduction of certain uses can be made without significantly impacting public health and safety.

Fixed allotment rationing establishes a customer's water consumption goal on a billing unit basis, calculated from an estimate of essential or normal uses, and provides an average use for each particular type of customer. Seasonal use fluctuations will also be incorporated in the formula. These calculations are generally based on meter size, number of dwelling units and average consumption for type of use. A per connection allotment is easy to implement, but does not specifically distinguish between families with large water use requirements and those with none. A fixed allocation is preferred from the standpoint that each customer can determine their own water use priorities.

Specific use bans are easy to implement and enforce. The specific restrictions generally apply to outside water use activities which can be limited or prohibited without significant impact on most customers. These bans include regulation of irrigation times;

the hosing of hard surfaces; prohibiting water waste; limiting the filling of pools and spas; etc.

Cooperation with each stage is mandatory unless a significant financial hardship would be created through water limitations. Also eligible for exceptions are proven medical, or other health and safety needs. Variances in the established allocations will be considered on an individual basis by a Variance Review Committee appointed by the Director of Public Works. All requests must be made on the form provided by the Utilities Division.

Variance Petitions

Variance petitions for additional allocations will not be considered until after an excess water use fee occurs on a bill.

Variances may be requested based on any of the following criteria:

- Extraordinary water use is necessary for documented medical reasons. Correspondence to be sent directly from the medical professional to the Variance Review Committee.
- The documented number of residents in a household makes adherence to allocations impossible without detrimentally affecting health and safety of the occupants.
- The designated allocation will cause unnecessary and undue financial hardship on the applicant or public.
- The designated application will create an emergency condition.

Petitions must be filed on the City's form in person by the customer of record or by a notarized application for non-resident owners.

In addition, all variance requests must be accompanied by a water use survey completed by the customer. Water use audits to the establishment may be performed upon recommendation of the Committee prior to further review of the request. The Committee may deny or modify the variance and impose any water use conditions it deems appropriate to the petitioner, provided that granting of the petition will not adversely affect the water supply or service to other existing water customers.

Additional water allocations will be granted on a one-time basis per residence.