

**SUBJECT:** Culinary Water Supply/Shortage and Drought  
Management Conservation Plan

**PG 1 OF 8**

**POLICY NO.:** 10.88

**APPROVED BY:** Water and Energy Services Board

**EFFECTIVE DATE:** Immediate

**METHOD OF APPROVAL:** Water and Energy  
Services Approved by City Council February 1, 2001  
Revised March 2003, June 2003, Sept. 2004

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**POLICY:** It shall be the policy of the City to implement the procedures and restrictions outlined herein under four stages of culinary water resource shortage that may occur in the St. George area.

**PURPOSE AND OBJECTIVE:** This culinary water shortage and drought management plan is intended to establish measures for essential conservation of water resources and to provide for equitable distribution of limited water supplies, in order to balance demand and limited available supplies and to assure that sufficient water is available to preserve public health and safety within the City of St. George.

**PROCEDURES AND RESPONSIBILITIES:**

The City shall encourage wise use of water and conservation of all water resources on an on-going basis.

In the event of an unforeseeable disaster or water emergency such as an extended drought, earthquake, reservoir or well failure or other major disruption of the water supply, the City will implement the attached four-stage shortage of culinary water conservation management plan. The implementation will be under the approval and direction of the City Council and City Manager. The City staff (City department heads and City Manager) shall meet on a regular basis to discuss the shortage conditions and ensure all City departments are doing their part to comply, enforce and encourage the outlined water conservation measures.

Water conservation stages shall be determined by the amount of water available or the potential for water interruption. The Water Services Department shall monitor the supply and customer demand for water. When the Water Services Department and City Manager find that the guidelines for initiation of any stage, as set forth in this Article have been satisfied, they shall recommend to the City Council that the appropriate Stage be declared.

Except as otherwise may be provided by this policy any prohibition on the use of water shall become effective immediately upon publication in a newspaper of general circulation within the City. Except as otherwise may be provided by the City Council, any provisions requiring a percentage reduction in the use of water shall become effective at the first filing period commencing on or after the date of such publication.

The following shortage or drought guidelines will be used to decide what stage or level should be implemented.

◆ **STAGE 1:**

- ◆ A Stage 1 shortage shall be declared when the Water Services Department Staff and the City Manager determine that a 5% - 10% reduction in culinary water is required.
- ◆ Stage 1 compliance shall consist of voluntary implementation of water conservation methods including, without limitation, reduced irrigation as well as the mandatory restrictions.

**STAGE 2:**

- ◆ A Stage 2 shortage shall be declared when Water Services Department Staff and the City Manager determine that a 15% - 20% reduction in culinary water is required.
- ◆ Stage 2 compliance methods include mandatory methods as well as continued encouragement of voluntary measures specified in Stage 1.

**STAGE 3:**

- ◆ A Stage 3 shortage shall be declared when Water Services Department Staff and the City Manager determine that a 25% - 30% reduction in culinary water is required.
- ◆ Stage 3 compliance methods include mandatory methods specified in Stage 2 as well as continued encouragement of voluntary measures specified in Stage 1.

**STAGE 4:**

- ◆ A Stage 4 shortage shall be declared when Water Services Department Staff and the City Manager determine that a 40% - 60% reduction in culinary water is required.
- ◆ Stage 4 compliance methods include mandatory methods specified in Stage 2 as well as continued encouragement of voluntary measures specified in Stage 1.

**MANAGEMENT PLAN**

**STAGE 1: Voluntary Restrictions on nonessential water use:**

Estimated reduction goal – 10% of peak use.

Suggested Voluntary Conservation methods

**INSIDE:**

- Fix dripping and leaking faucets and toilets. A leak in the toilet can waste more than 100 gallons of water a day.
- Don't let the water run while shaving. Filling the sink basin when shaving uses 1 gallon of water, letting the water run uses 5 –10 gallons.
- Don't flush the toilet unnecessarily. Consider installing water saving toilets. Water saving toilets use 1.6 gallons of water, standard toilets use 5 to 7 gallons of water each time it's flushed.
- Take shorter showers or fill bathtub only part way. Long showers waste 5 to 10 gallons of

water every minute.

- Consider installing low flow showerheads
- Don't run the water while brushing teeth. Turning the water off while brushing your teeth can save 1.5 to 3.5 gallons of water.
- Don't run the tap to make water hot or cold. Keep a bottle of drinking water in the refrigerator so you don't have to run the tap to get a cool drink of water.
- Wash only full loads of dishes and laundry. A dishwasher uses approximately 25 gallons of water; a washing machine uses 30 –35 gallons of water per cycle.
- Consider replacing any appliance that utilizes water with a low-flow type appliance if such appliance is not already low-flow.
- Reduce or eliminate the use of the garbage disposal.
- Wash fruits and vegetables in a basin instead of under running water.
- Notify hotel and restaurant patrons of water conservation goals
- Serve water at restaurants only upon request
- Encourage all hotels, motels, inns and bed and breakfast establishments to change sheets no more than every four days for guests staying that long, unless necessary or specifically requested by the guest.
- Adjust temperatures in buildings with water-cooled air conditioners to require less water.
- Use of reuse water for construction purposes if it is available.

#### **OUTSIDE:**

- Raise your lawn mower cutting height. Longer grass needs less water.
- Delay planting any new grass, sod or other new landscaping.
- Don't fill swimming pools. If possible, cover the swimming pool an uncovered pool will lose 900 – 3,000 gallons of water a month to evaporation, a covered pool losses 300 –1,000 gallons a month.
- Use mulch around shrubs and garden plants to save soil moisture.
- Use a hose with a shut off nozzle if washing cars at home or wash at a facility that recycles water. Washing the car with the hose running uses 100-200 gallons of water.
- Sweep sidewalks and steps rather than hosing.
- Aerate turf areas
- Know your plants water requirements and apply only the amount required for good plant health
- Monitor ET data. Know how much moisture is lost to evapotranspiration (ET) as this is what needs to be replaced back into the soil for good plant health.
- Monitor soil moisture to determine if watering is needed.
- Water between the hours of 8:00 PM and 8:00AM.
- Avoid watering on windy days or midday when the evaporation rate is the highest.
- Keep fire hydrants closed.
- Repair leaks in hoses, pipes, faucets and connections.
- Limit operation of non-recycling fountains
- Limit City fleet washing by 30% – 50%

#### **Mandatory restrictions on nonessential water use:**

- ◆ Outdoor irrigation is to be done between 8:00 pm and 8:am, preferably completing cycles before 4:00 am.

**STAGE 2: Mandatory restrictions on nonessential water use:**

Estimated reduction goal – 15 – 20% of peak use.

**Procedure:** By authority of the City Manager and the City Council, the following mandatory water conservation measures will be implemented.

- ◆ Snow Canyon Compact members shall use their exact percentage allocation of the water being produced from Snow Canyon Well System.
- ◆ Large irrigators using culinary water, including but not limited to HOA's, City Parks, Golf Courses and schools, shall reduce irrigation by 25% of baseline year use (2000 is the recommended baseline year)
- ◆ Those using culinary water for irrigation will be allowed to irrigate between the hours of 8:00 PM and 8:00 AM.
- ◆ Use of water for, washing streets driveways or other paved areas is prohibited except to alleviate immediate fire or sanitation hazards.
- ◆ Non commercial car washing requires using a hose with an automatic shut off nozzle
- ◆ Public pools shall be covered during non-use hours.
- ◆ Use of culinary water for ornamental fountains, waterfalls, or reflection pools is prohibited.
- ◆ Delay planting any new grass or sod or other new landscaping.
- ◆ Water shall be served at restaurants only upon request

**Enforcement**

If any person or entity violates these restrictions, citations could be issued, or the City may elect to remove the water service from the property. A water penalty surcharge of up to (3) three times the conservation water rate shall be charged for water usage in excess of 80% and not more than 100% of the baseline year amount. A water penalty surcharge of up to five percent (5%) of the conservation water rate shall be charged for water usage in excess of 100% of the baseline year.

**STAGE 3: Mandatory restriction on all culinary water uses:**

Estimated reduction goal – 25% - 30 % of peak use.

**Procedure:** By authority of the City Manager and the City Council, the mandatory requirements in Stage 2 as well as the following mandatory water conservation measures will be implemented

- ◆ The use of fire hydrants for purposes other than fire protection will be prohibited.
- ◆ If available, reuse water may be used for construction purposes.

- ◆ Water use for the following non-essential uses shall not be permitted:
  - Non-commercial washing of automobiles and trucks.
- ◆ Users will be allowed 70% of use levels of the baseline year use All users will reduce demand by 30%.
- ◆ Culinary water will not be used to irrigate City parks or Golf Courses or schools.
- ◆ Spray irrigation and hand watering may occur for a total of 15 minutes per landscaped area.
- ◆ Drip irrigation systems, bubbler or soaker hoses may be operated for a total of 2 hours.
- ◆ Filling of non public swimming pools is prohibited.

### **Enforcement**

If any person or entity violates these restrictions, citations could be issued, or the City may elect to remove the water service from the property. A violation of Stage 3 mandatory requirements shall constitute a class b misdemeanor. A water penalty surcharge of up to (3) three times the conservation water rate shall be charged for water usage in excess of 70% and not more than 100% of the baseline year amount. A water penalty surcharge of up to five percent (5%) of the conservation water rate shall be charged for water usage in excess of 100% of the baseline year.

### **Exemptions or Variance:**

- (1) If compliance with the non-essential use of water restrictions would result in extraordinary hardship upon a water user, the water user may apply for an exemption or variance. For purposes of this section, extraordinary hardship means a permanent damage to property or other personal or economic loss, which is substantially more severe than the sacrifices borne by other water users subject to the nonessential use of water restrictions.
- (2) A person or business entity believing he suffers an extraordinary hardship and desiring to be wholly or partially exempt from the restrictions on the non-essential use of water shall submit a written request with full documentation supporting the need for the requested relief to the City. The application shall contain information specifying:
  - (a) The nature of the hardship claimed and reasons for the requested exemption or variance.
  - (b) The efforts taken by the applicant to conserve water and extent to which the applicant, without extraordinary hardship, may reduce which water use.
- (3) The City shall advise the applicant of its decision regarding the application. An exemption or variance will be granted only to the extent necessary to relieve extraordinary hardship.

### **STAGE 4: Water rationing plan for all available culinary water resources**

Estimated reduction goal – 40% to 60% of peak use.

**Procedure:** By the authority of the City Manager and City Council, the following mandatory water rationing plan will be implemented:

**(A) General:**

It is imperative that water customers within the City of St. George area achieve an immediate and further reduction in the water use in order to extend existing water supplies and, at the same time, assure that sufficient water is available to preserve the public health and sanitation, and provide fire protection service.

The objective of this Local Water Rationing Plan is to effect an immediate 40 percent reduction in water usage. Should drought conditions continue further reductions in usage might be required. If it is necessary to implement further reductions, this Plan will be modified to reduce the levels more. It is the City Water Services Department responsibility to continually monitor on-hand quantities to determine if amendments are required.

The Plan provides for equitable reductions in water usage on the part of each water customer. The success of this Plan depends on the cooperation of all water customers.

During this stage:

- The approval of any new building permits will be prohibited until the conservation restrictions are lifted.

**(B)** The following water uses are declared non-essential and shall be prohibited within the City of St. George as well as the restriction specified in Stages 2 and 3:

- ◆ It is the primary responsibility of each water customer to meet its mandated water use reduction goal in whatever manner possible.
- ◆ The watering of lawns.
- ◆ The watering of outdoor gardens, landscaped areas, trees, shrubs, and other outdoor plants, except by means of a bucket, pail, or handheld hose equipped with an automatic shut-off nozzle between the hours of 8:00 p.m. and 8:00 a.m.
- ◆ The use of water for flushing sewers or hydrants by municipalities or any public or private individual or entity except as deemed necessary and approved in the interest of public health or safety and specifically approved by the City.
- ◆ The use of fire hydrants by the Fire Department for testing fire apparatus and for Fire Department drills, except as deemed necessary in the interest of public safety and specifically approved by the City.

**(C) Water use restrictions for all water customers:**

Customers include residential, commercial, industrial, institutional, public and all other users, with the exception of hospitals and health care facilities.

**(E) Water use restrictions for hospital and health care facilities:**

Hospitals and health care facilities shall comply with all restrictions imposed on water customers as may be applicable to each individual institution; to the extent compliance will not endanger the health of the patients or residents of the institution.

Each hospital and health care facility shall survey its water usage patterns and requirements and implement such additional conservation measures as may be possible without endangering the health of patients or residents to achieve a 25 percent reduction in the institution's water usage. The level of conservation arrived at will be recommended to the City for billing and record. The established level that does not endanger the health of the patients will be provided to the City for record.

**Enforcement:**

If any person or entity violates these restrictions, citations could be issued, or the City may elect to remove the water service from the property. A violation of Stage 4 mandatory requirements shall constitute a class b misdemeanor. A water penalty surcharge of up to (3) three times the conservation water rate shall be charged for water usage in excess of 70% and not more than 100% of the baseline year amount. A water penalty surcharge of up to five percent (5%) of the conservation water rate shall be charged for water usage in excess of 100% of the baseline year.

The utility billing department will monitor usage by using triggers and computer alarms for notification.

**Exemptions or variance:**

If compliance with the non-essential use of water restrictions would result in extraordinary hardship upon a water user, the water user may apply for an exemption or variance. For purposes of this section, extraordinary hardship means a permanent damage to property or other personal or economic loss, which is substantially more severe than the sacrifices borne by other water users subject to the nonessential use of water restrictions.

A person or business entity believing he suffers an extraordinary hardship and desiring to be wholly or partially exempt from the restrictions on the nonessential use of water shall submit a written request with full documentation supporting the need for the requested relief to the City.

The application shall contain information specifying:

- ◆ The nature of the hardship claimed and reason for the requested exemption or variance.
- ◆ The efforts taken by the applicant to conserve water and extent to which water use may be reduced by the applicant without extraordinary hardship.
- ◆ The City shall advise the applicant of its decision regarding the application. An exemption or variance will be granted only to the extent necessary to relieve extraordinary hardship.