

Franklin County Water Shortage Response Plan

Water Shortage Response Plan Franklin County, North Carolina May 2023

The procedures herein are written to reduce potable water demand and supplement existing drinking water supplies whenever existing water supply sources are inadequate to meet current demands for potable water.

I. Authorization

The Franklin County Manager shall enact the following water shortage response provisions whenever the trigger conditions outlined in Section IV are met. In his or her absence, the Public Utilities Director will assume this role.

Ms. Kimberly B. Denton
Franklin County Manager
Phone: (919) 496-5994

E-mail: kdenton@franklincoutync.gov

Chris Doherty
Franklin County Public Utilities Director
Phone: (919) 556-6177
E-mail: cdoherty@franklincountync.gov

II. Notification

The following notification methods will be used to inform water system employees and customers of a water shortage declaration: employee e-mail announcements, notices at municipal buildings, notices in water bills. Required water shortage response measures will be communicated through *The Franklin Times* and PSA announcements on local radio and cable stations and the County website (<http://www.franklincountync.gov>). Declaration of emergency water restrictions or water rationing will be communicated to all customers by telephone via a reverse 911 call out system.

III. Levels of Response

Responses are in the attached City of Henderson Water Shortage Response Ordinance 15B, except for year-round mandatory outdoor water use restrictions detailed below.

The mandatory water restrictions also limit the use of Franklin County supplied water for other uses such as power washing driveways, sidewalks, decks, patios, streets, and exterior building surfaces except on Saturdays and Sundays. The commercial use of power washers is permitted under these restrictions.

WATER USE	IRRIGATION SCHEDULE
Automatic/non- automatic irrigation systems	ODD -Tuesdays & Saturdays EVEN -Wednesdays & Sundays 12 a.m.(midnight) - 10:00 a.m.
Hose End Sprinklers	ODD -Tuesdays & Saturdays EVEN -Wednesdays & Sundays 6:00 am-10:00 am/6:00 pm-10:00 pm
Hand-Held Hose	ODD -Tuesdays & Saturdays EVEN -Wednesdays & Sundays 6:00 am-10:00 am/6:00 pm-10:00 pm
Vehicle Washing	No Restrictions
Pressure Washing	Saturday & Sunday
No Watering Allowed	Mondays, Thursdays, & Fridays

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Washing of private vehicles shall be allowed on any day of the week except in the event of extreme periods of water shortage (i.e., prolonged excessive drought, disruption of water supply, Kerr Lake Regional Water System [KLRWS] mandatory restrictions, etc.)

The mandatory water use restrictions apply to all Franklin County Water Customers including those in the Town of Youngsville, Town of Franklinton, Town of Bunn, and Lake Royale.

The first violation of these restrictions will result in a written warning, a second violation will result in a \$200 fine, a third violation will result in a \$500 fine, and a fourth will result in disconnection of the water service.

EXEMPTIONS TO IRRIGATION REQUIREMENTS:

The watering restrictions shall not apply to:

- 1) Properties using non-potable/reuse water for landscape irrigation.
- 2) Watering of commercial containerized plants and commercial plant stock in trade maintained for resale, and
- 3) Visually supervised operation of watering systems for short periods of time to check system condition.
- 4) Property owners may obtain a 45-day New Landscaping Establishment Permit from the Public Utilities Department for the purpose of establishing new plantings. New plantings, for the purpose of this permit, are defined as the installation of new sod to the entire yard, whole yard first seeding, large commercial plantings, or whole yard re-establishment (50% or greater disturbance of lawn). The permit will be applicable during the installation and for 45 days from substantial completion of the installation. Irrigation will be permitted during the hours 6:00am to 10:00am.
- 5) The water level in any swimming or wading pool may be supplemented to provide for proper operation and sanitary pool conditions.
- 6) Residents are prohibited from washing areas such as sidewalks, patios, decks, driveways, parking lots, streets and exterior building surfaces except on Saturdays and Sundays. This restriction shall not apply to the washing of soiled areas for maintenance of public health and sanitary conditions. The commercial use of power washers is permitted.

Leaking water services or plumbing must be repaired with five (5) days of written notification by the Public Utilities Department.

IV. Triggers

Franklin County is provided water solely by purchase from Kerr Lake RWS, City of Raleigh and the Town of Louisburg. When Kerr Lake RWS and/or the City of Raleigh declares a water shortage Franklin County is required to do so as well. During this time the Franklin County Utilities Director, or his/her designee, will stay in close contact with Kerr Lake Water System and/or the City of Raleigh and follow their triggers.

Return to Normal

When water shortage conditions have abated and the situation is returning to normal, water conservation measures employed during each phase should be decreased in reverse order of implementation. Permanent measures directed toward long-term monitoring and conservation should be implemented or continued so that the community will be in a better position to prevent shortages and respond to recurring water shortage conditions.

V. Enforcement

The provisions of the water shortage response plan will be enforced by Franklin County personnel and local law enforcement. Violators may be reported on the County's phone line. Citations are assessed according to the following schedule depending on the number of prior violations and current level of water shortage.

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Water Shortage Level	First Violation	Second Violation	Third Violation
Voluntary Reductions	N/A	N/A	N/A
Mandatory Reductions (Stages 2 and 3)	Warning	\$200	\$500
Emergency Reductions	\$250	Discontinuation of Service	Discontinuation of Service
Water Rationing	\$500	Discontinuation of Service	Discontinuation of Service

Violation of this amendment to the Water Shortage Response Ordinance may be punished by any means available to Franklin County through the provisions of N.C.G.S 160A-175. A written warning will be issued for the first violation, a second violation of this ordinance is \$200.00, a third violation is \$500.00, and a fourth violation shall result in interruption of water service to the offending customer.

The County will issue written notification to the customer and occupant of intent to interrupt water service and twenty-four (24) hours later will interrupt water service unless the violation has ceased. Each day shall constitute a separate violation. If water service has been interrupted due to repeat violation of this ordinance, service will not be re-instated until the Public Utilities Director has determined that the risk to the County water supply has been alleviated or the Public Utilities Director is otherwise assured of compliance. All fines associated with violations of this ordinance shall be paid within thirty (30) days of first notification. Failure to do so will result in interruption of service. Service will not be restored until such time that all applicable fines have been paid.

VI. Public Comment

Customers will have multiple opportunities to comment on the provisions of the water shortage response plan. First, a draft plan will be available at County Offices for customers to view. A notice will be included in customer water bill notifying them of such. All subsequent revisions to the draft plan will be published at least 30 days prior to an adoption vote by Franklin County Commissioners.

VII. Variance Protocols

Customers may submit a written request to receive a variance from this policy. All requests must be submitted to the County Office for review by the County Manager or his or her designee. A decision to approve or deny individual variance requests will be determined within two weeks of submittal after careful consideration of the following criteria: impact on water demand, expected duration, alternative source options, social and economic importance, purpose (i.e. necessary use of drinking water) and the prevention of structural damage.

VIII. Effectiveness

The effectiveness of the Franklin County water shortage response plan will be determined by comparing the stated water conservation goals with observed water use reduction data. Other factors to be considered include frequency of plan activation, any problem periods without activation, total number of violation citations, desired reductions attained, and evaluation of demand reductions compared to the previous year's seasonal data.

VIII. Revision

The water shortage response plan will be reviewed and revised as needed to adapt to new circumstances affecting water supply and demand, following implementation of emergency restrictions, and at a minimum of every five

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years in conjunction with the updating of our Local Water Supply Plan. Further, a water shortage response planning work group will review procedures following each emergency or rationing stage to recommend any necessary improvements to the plan to Franklin County's Commissioners. The Franklin County Utility Director is responsible for initiating all subsequent revisions.

CITY OF HENDERSON, NORTH CAROLINA

Chapter 15B WATER SHORTAGE RESPONSE ORDINANCE

Sec. 15B-1. Purpose.

The purpose of this chapter is to provide for the declaration of official phases of water supply shortage situations and the implementation of voluntary and mandatory water conservation measures throughout the city and for all of its water customers in the event a shortage is declared.

(Ord. of 9-24-07(1), § 1; Ord. No. 11-04, § 1, 3-14-11)

Sec. 15B-2. Definitions.

Allotment, as the term is used in this chapter, shall mean the maximum quantity of water allowed for each customer over any applicable period as established in the water rationing provisions of this chapter.

Any water, as the term is used in this chapter, shall mean any type of water, including fresh water, wastewater, or reclaimed water.

City manager, as the term is used in this chapter, shall mean the City Manager of the City of Henderson, or in his absence, the assistant city manager (or other designee of the city manager).

Customer, as the term is used in this chapter, shall mean any person using water for any purpose from the City of Henderson's water distribution system or from lines under the city's control and for which either a regular charge is made or, in this case of bulk sales, a cash charge is made at the site of delivery.

Emergency, as the term is used in this chapter, shall mean that water supplies are below the level necessary, to meet normal needs and that serious shortages exist in the area.

Excess use, as the term is used in this chapter, shall mean the usage of water by a water customer in excess of the water allotment provided under the water rationing provisions of this chapter for that customer, over and applicable period.

Fresh water, as the term is used in this chapter, shall mean water withdrawn from surface or groundwater that has not been previously used.

Mandatory conservation, as the term is used in this chapter, shall mean that raw water supplies from the Kerr Lake Regional Water System are consistently below seasonal averages, and if they continue to decline, may not be adequate to meet normal needs.

Non-residential customer, as the term is used in this chapter, shall mean commercial, industrial, institutional, public and all other such users, with the exception of hospitals and health care facilities.

Rationing, as the term is used in this chapter, shall mean procedures established to provide for the equitable distribution of critically-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.

Residential customer, as the term is used in this chapter, shall mean any customers who receive water service for a single or multi-family dwelling unit. The term residential customer does not include educational or other institutions, hotel, motel, or similar commercial establishments.

Service interruption, as the term is used in this chapter, shall mean the temporary suspension of water supply, or reduction of pressure below that required for adequate supply, to any customer, portion of a water supply, or entire system.

Voluntary conservation, as the term is used in this chapter, shall mean that conditions exist which indicate the potential for serious water supply shortages.

Waste of water, as the term is used in this chapter, includes, but is not limited to (1) permitting water to escape down a gutter, ditch, or other surface drain, or (2) failure to repair a controllable leak of water due to defective plumbing.

Wastewater, as the term is used in this chapter, shall mean water, which has been previously used for industrial, municipal, domestic, or other purpose, and has not been returned to the surface or groundwater source.

Water, as the term is used in this chapter, shall mean water available to the City of Henderson from the Kerr Lake Regional Water System by virtue of its water rights or contract, or any treated water introduced by the City of Henderson into its water distribution system, including water offered for sale.

Water use classes, as the term is used in this chapter, shall be established as follows:

CLASS 1 ESSENTIAL WATER USES:

Domestic use:

- Water necessary to sustain human life and the lives of domestic pets, and to maintain minimum standards of hygiene and sanitation.

Health care facilities:

- Patient care and rehabilitation, including swimming pools used for patient care and rehabilitation.

Public use:

- Fire hydrants
 1. Fire fighting.
 2. Certain testing and drills by the fire department if performed in the interest of public safety and if approved by the city manager.
- Flushing of sewers and hydrants: As needed to ensure public health and safety and if approved by the city manager.

CLASS 2 SOCIALLY OR ECONOMICALLY IMPORTANT USES OF WATER:

All domestic uses other than those included in classes 1 and 3:

- Home water use including kitchen, bathroom and laundry use.
- Minimal watering of vegetable gardens.
- Watering of trees where necessary to preserve them.

Commercial, agricultural, industrial and institutional uses:

- Outdoor commercial watering (public or private) using conservation measures and to the extent that sources of water other than fresh water are not available to use.
- Irrigation for commercial vegetable gardens and fruit orchards or the maintenance of livestock.

- Watering by commercial nurseries at a minimum level necessary to maintain stock.
- Water use by arboretums and public gardens of national, state, or regional significance where necessary to preserve specimens.
- Use of fresh water at a minimum rate necessary to implement vegetation following earth moving, where such vegetation is required by law or regulation.
- Watering of golf course greens.
- Filling and operation of swimming pools:
 1. Residential pools which serve more than twenty-five (25) dwelling units.
 2. Pools used by health care facilities for patient care and rehabilitation.
 3. Municipal pools.
- Commercial car and truck washes.
- Commercial laundromats.
- Restaurants, clubs, and eating places.
- Air conditioning:
 1. Refilling for start up at the beginning of the cooling season.
 2. Make-up of water during the cooling season.
 3. Refilling specifically approved by health officials and the municipal governing body, where the system has been drained for health protection or repair purposes.
- Schools, churches, motels/hotels and similar commercial establishments.

CLASS 3 NONESSENTIAL USES OF WATER:

Ornamental purposes:

- Fountains, reflecting pools, and artificial waterfalls.

Outdoor noncommercial watering (public or private):

- Gardens, lawns, parks, golf courses (except greens), playing fields and other recreational areas.
- Filling and operation of recreational swimming pools which serve fewer than twenty-five (25) dwellings.
- Noncommercial washing motor vehicles.
- Serving water in restaurants, clubs, or eating places except by specific request.
- Air conditioning: refilling cooling towers after draining except as specified in class 1.

Public use:

- Fire hydrants: Any purpose, including use of sprinkler caps and testing fire apparatus and for fire department drills, except as listed class 1.
- Flushing of sewers and hydrants except as listed in class 1.

(Ord. of 9-24-07(1), § 1; Ord. No. 11-04, § 1, 3-14-11)

Sec. 15B-3. Declaration of voluntary conservation.

Whenever the city manager finds the water level in Kerr Lake is consistently at elevation 294, he shall declare that Voluntary Conservation conditions exist, and that the Director of the Kerr Lake Regional Water System shall, on a daily basis, monitor the lake level and the water use demand.

In addition, the city manager shall call upon all water customers to employ voluntary water conservation measures within forty-eight (48) hours of receiving notice (see section 15B-13) to limit water use (especially Class 3 uses) and eliminate the waste of water. The goal for water reduction shall be five (5) percent.

(Ord. of 9-24-07(1), § 1; Ord. No. 11-04, § 1, 3-14-11)

Sec. 15B-4. Declaration of mandatory conservation.

Whenever the city manager finds the water level in Kerr Lake is consistently at elevation 289, he shall declare that mandatory conservation conditions exist. This implies that lake level is nearing a level where insufficient water can enter the raw water intake.

The city manager shall continue to encourage voluntary water conservation measures for its customers as defined under the voluntary conservation declaration, and shall further require mandatory measures be put in place, such as a ban be imposed on all Class 3 uses for the duration of the shortage until it is declared ended by the city manager. The goal for water reduction shall be ten (10) percent.

(Ord. of 9-24-07(1), § 1; Ord. No. 11-04, § 1, 3-14-11)

Sec. 15B-5. Declaration of a water shortage emergency.

Whenever the city manager finds that water level in Kerr Lake has dropped to elevation 284 or below, and/or that a serious shortage exists due to other reasons, he shall declare that a water shortage emergency exists. It would be recommended that the city identify all Class 1, Essential Uses, in specific, and make them targets for voluntary conservation initiatives.

The Kerr Lake Regional Water System shall require mandatory measures be put in place, such as a ban be imposed on all Class 2 and Class 3 uses for the duration of the shortage. The goal for water reduction shall be forty (40) percent. These restrictions should be continued until the emergency is declared ended.

In adopting such restrictions, the city manager may take into consideration the following priorities of its obligations:

- (1) To public health and fire protection;
- (2) To those water users residing within the city limits of the city;
- (3) To those to whom the city has contracted obligations for supplying water; and
- (4) To other users located outside the city limits of the City of Henderson.

(Ord. of 9-24-07(1), § 1; Ord. No. 11-04, § 1, 3-14-11)

Sec. 15B-6. Declaration of mandatory rationing.

Whenever the city manager finds that water level in Kerr Lake has dropped to elevation 280, declared a water shortage emergency, and finds a need to provide for the equitable distribution of critically-limited water supplies, in order to balance demand on limited available supplies, and to assure that sufficient water is available to preserve public health and safety, he shall call for mandatory rationing by its water users until the emergency is declared ended.

During this emergency situation, the amount of water could be reduced by fifty (50) percent or more. This amount shall be determined by the city council of the City of Henderson.

(Ord. of 9-24-07(1), § 1; Ord. No. 11-04, § 1, 3-14-11)

Sec. 15B-7. Objectives of mandatory rationing.

An ordinance that provides for mandatory rationing shall state findings that:

- (1) It is imperative that water customers achieve an immediate further reduction in 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 to provide fire protection service.
- (2) The immediate further reduction in water usage is another step along a continuum of responses to the present water supply shortage. Should shortage continue further reductions in usage may be required. It must be emphasized that the additional usage reduction in the rationed area is a valid and attainable goal reflective of the conditions that currently exist.
- (3) It is imperative that water customers achieve an immediate further reduction in 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 to provide fire protection service.
- (4) The plan provides for equitable reductions in water usage and for equal sacrifice on the part of each type of water customer. The success of this chapter depends on the cooperation of all water customers in the emergency area.

(Ord. of 9-24-07(1), § 1; Ord. No. 11-04, § 1, 3-14-11)

Sec. 15B-8. Mandatory rationing for residential users.

- (a) Unless the city council otherwise provides, mandatory rationing shall include the following for metered residential water customers.
 - (1) The number of permanent residents in each dwelling unit (household) will determine the amount of water that each household will be allowed.
 - (2) Each dwelling unit (household) shall be allotted one hundred thirty (130) gallons per day for each resident of the household.
 - (3) Residential water customers are required to provide city and utility personnel with reasonable access to read meters as necessary to this rationing declaration. Where access is not readily available, all reasonable efforts to contact customers in order to arrange for access to read meters shall be made. In the event a water customer does not allow entry to read the meter after reasonable efforts to arrange for such access, the dwelling unit (household) allotment will be reduced to one hundred (100) gallons per day.

- (4) a. If it is found that the residential water allotment provided under this chapter would [create] an extraordinary hardship for individual customers, as in the case of special health-related requirements, a revised allotment or variance for the particular customer may be established;
- b. Any person aggrieved by a decision relating to such an exemption or variance may file an opposed to with the city manager (or clerk) in accordance with the city's normal administrative procedures and the city manager can deny, modify, or grant any variance on such appeal.

(Ord. of 9-24-07(1), § 1; Ord. No. 11-04, § 1, 3-14-11)

Sec. 15B-9. Mandatory rationing for nonresidential water users.

- (a) Nonresidential customers include commercial, industrial, public and all other such users with the exception of hospitals and health care facilities.
- (b) Nonresidential water customers shall further reduce their water usage to sixty-five (65) gallons per person per day or to fifty (50) percent of use levels during last metered recording.
- (c) It is the primary responsibility of each nonresidential water customer to meet the mandated water use reduction goal in whatever manner possible, including limitation of operating hours or days if necessary.
- (d) The city will establish a water allotment for each nonresidential water customer, based upon a required further reduction water usage from the rate of water used by the customer at the last recorded use level.
- (e) Each nonresidential water user shall provide access to city's personnel for the purpose of meter reading and monitoring of compliance with this chapter. All reasonable efforts will be made to contact customers to arrange for access.

(Ord. of 9-24-07(1), § 1; Ord. No. 11-04, § 1, 3-14-11)

Sec. 15B-10. Mandatory rationing for hospitals and health care facilities.

Unless the city council otherwise provides, mandatory rationing for the hospitals and health care facilities shall include the following:

- (1) Hospitals and health care facilities shall comply with all restriction imposed on residential and nonresidential 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.
- (2) Each hospital or 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 its patients or residents to achieve a further reduction in the institution's water usage.

(Ord. of 9-24-07(1), § 1; Ord. No. 11-04, § 1, 3-14-11)

Sec. 15B-11. Variances.

The City of Henderson understands that water restrictions can cause economic hardships on certain portions of its water customers: additionally, the restriction could be infeasible for others that have implemented water use reduction strategies into their daily practices prior to drought conditions being in place.

- (1) If the mandated further reduction in water usage cannot be obtained without imposing extraordinary hardship which threatens health and safety, the nonresidential customer may apply to the city manager for a variance. For these purposes "extraordinary hardship" means a permanent damage to

property or an economic loss which is substantially more severe than the sacrifices borne by other water users subject to this water rationing ordinance. If the further reduction would cause an extraordinary hardship or threaten health or safety, a variance may be granted by the city manager, and a revised water use reduction requirement for the particular customer may be established.

- (2) Applications for water use variance requests are available from the city hall. All applications must be submitted in writing to city hall for review by the city manager or his or her designee. A decision to approve or deny individual variance requests will be determined within two weeks of submittal after careful consideration of the following criteria: impact on water demand, expected duration, alternative source options, social and economic importance, purpose (i.e. necessary use of drinking water), the prevention of structural damage, and the protection of health and safety.
- (3) Decisions rendered by the city manager may be appealed to the city council if such appeal is made in writing and delivered to the city manager's office within five (5) days of the city manager's decision on the variance request.

(Ord. No. 11-04, § 1, 3-14-11)

Editor's note(s)—Ord. No. 11-04, § 1, adopted Mar. 14, 2011, repealed § 15B-11, in its entirety and enacted new provisions to read as herein set out. Prior to this amendment, § 15B-11 pertained to "Additional conservation recommendations." See Code Comparative Table for derivation.

Sec. 15B-12. Notices.

The following notification methods will be used to inform water system employees and customers of a water shortage declaration: employee e-mail announcements, notices posted at city hall, notices in water bills. Required water shortage response measures will be communicated through The Daily Dispatch, PSA announcements on local radio stations and the city's website (<http://www.Hendersonnc.org/>). Declaration of emergency water restrictions or water rationing will be communicated to all customers by local media, including the city's website.

(Ord. No. 11-04, § 1, 3-14-11)

Editor's note(s)—Ord. No. 11-04, § 1, adopted Mar. 14, 2011, repealed § 15B-12, in its entirety and enacted new provisions to read as herein set out. Prior to this amendment, § 15B-12 pertained to "Enforcement of water rationing." See Code Comparative Table for derivation.

Sec. 15B-13. Conservation recommendations.

In the event of a water shortage, customers shall also be encouraged to adopt the following measures:

(a) *Indoor residential use:*

(1) *Conservation for voluntary conservation phases:*

- a. Use dishwashers only when they are full. Washing dishes by hand (don't let the tap run!) saves about twenty-five (25) gallons.
- b. Adjust water level on clothes washing machines, if possible. Use full load only, of not adjustable.
- c. Turn off faucets while brushing teeth, etc. saves about five (5) gallons per day.
- d. Reduce water used per flush by installing toilet tank displacement inserts. A plastic jug may often be used as an alternative. DO NOT USE BRICKS—They disintegrate when soaked and the resulting grit hinders closing of the flap valve.
- e. Do not use the toilet as a trash can.

- f. Use sink and tub stoppers to avoid wasting water.
 - g. Keep a bottle of chilled water in the refrigerator for drinking.
 - h. Find and fix leaks in faucets and water using appliances. Faucets can usually be fixed cheaply and quickly by replacing washers.
 - i. Learn to read your water meter so you can judge how much water you use and what difference conservation makes.
 - j. Take shorter showers and shallow baths. Saves about twenty-five (25) gallons.
 - k. Reduce the number of toilet flushes per day. Each flush uses about five (5) gallons (two to three (2—3), if you have water saving toilets).
 - l. Don't use a garbage disposal.
 - m. Use non-phosphate detergent and save laundry water for lawns and plants.
- (2) *Conservation for emergency conservation or rationing phase (In addition to measures listed above).*
- a. Turn off shower while soaping up.
 - b. Use disposable eating utensils.
- (b) *Outdoor residential use.*
- (1) *Conservation for normal conditions and voluntary conservation phase:*
- a. Lawns:
 - 1. Water before 10:00 a.m. to prevent evaporation that occurs during the hottest part of the day. Morning is better than evening, when the dampness encourages growth of fungus.
 - 2. Water only when lawn shows signs of wilt. Grass that springs back when stepped on does not need water.
 - 3. Water thoroughly, not frequently: long enough to soak roots. A light sprinkling evaporates quickly and encourages shallow root systems. Water slowly to avoid runoff.
 - 4. Don't let the sprinkler run any longer than necessary. In an hour, six hundred (600) gallons can be wasted.
 - 5. Allow maximum of one (1) inch of water per week on your lawn. To measure, place cake tins outside to collect rain and water from sprinklers.
 - 6. Use pistol-grip nozzles on hoses to avoid waste when watering flowers and shrubs.
 - 7. Aerate lawns by punching holes six (6) inches apart. This allows water to reach roots rather than run off surfaces.
 - 8. Position sprinklers to water the lawn, not the pavement.
 - 9. Avoid watering on windy days when the wind not only blows water off target, but also causes excess evaporation.
 - 10. Keep sprinkler heads clean to prevent uneven watering.
 - 11. Adjust hose to simulate gentle rain. Sprinklers that produce a fine mist waste water through evaporation.

12. Know how to turn off an automatic sprinkler system in case of rain.
 13. Use an alarm clock or stove timer to remind you to shut off sprinklers that don't have timers.
- b. Vegetables and flower gardens:
1. Water deeply, slowly and weekly. Most vegetables require moisture to a depth of six (6) to eight (8) inches.
 2. Keep soil loose so water can penetrate easily.
 3. Keep weeds out to reduce competition for water.
 4. Put the water where you want it and avoid evaporation by using soil-soakers or slow running hoses, not sprinklers.
- c. Trees and shrubs:
1. Water deeply using a soil-soaker or drip-irrigation.
 2. Water only when needed. Check the depth of soil dryness by digging with a trowel.
 3. Mulch to reduce evaporation. A two (2) inch to three (3) inch layer of wood chips, pine needles, grass clippings, or straw keeps the soil cool in summer.
 4. Dig troughs around plants to catch and retain water.
 5. Water trees growing in full sun more often than those in shade.
 6. Do not use sprinklers. Apply water directly at base.
 7. Do not fertilize during the summer. Fertilizing increases a plant's need for water.
 8. Postpone planting until fall or spring when there is generally less need for water.
 9. Install trickle-drip irrigation systems close to the roots of your plants. By dripping water slowly, the system doesn't spray water in to the air. Use soil probes for large trees.
 10. Water when cloudy, at night, or even when a light rain is falling.
- d. Miscellaneous.
1. Do not allow children to play with hose or sprinklers.
 2. Limit car washing.
 3. Be ready to catch rainfall that occurs. Place containers under drain sprouts.
 4. Use leftover household water if available.
 5. Consider delaying the seeding or sodding of new lawns.
 6. Determine the amount of water being used outdoors by comparing water bills for summer and winter.
- (2) *Conservation for mandatory conservation phase (in addition to measures listed above).*
- a. Vegetable gardens and food trees should be given minimal amounts of water on an individual basis only.
- b. Do not water lawns and inedible plants.

- c. Do not use sprinklers.

Most outdoor watering is prohibited under emergency conservation conditions.

(c) *Hospital and health care facility use:*

- (1) Reduce laundry usage or services by changing the linens, etc. only when necessary to preserve the health of patients or residents.
- (2) Use disposable food service items.
- (3) Eliminated, postpone, or reduce, as they may be appropriate, elective surgical procedures during the period of emergency.

(d) *Industrial use.*

- (1) Identify and repair all leaky fixtures and water-using equipment. Give special attention to equipment connected directly to waterlines, such as processing machines, steam-using machines, washing machines, water-cooled air conditioners, and furnaces.
- (2) Assure that valves and solenoids that control water flows are shut off completely when the water-using cycle is not engaged.
- (3) Adjust water-using equipment to use the minimum amount of water required to achieve its stated purpose.
- (4) Shorten rinse cycles for laundry machines as much as possible, implement lower water levels wherever possible.
- (5) For processing, cooling, and other uses, either re-use water or use water from sources that would not adversely affect public water supplies.
- (6) Advise employees, students, patients, customers, and other users not to flush toilets unnecessarily. Install toilet tank displacement inserts; place flow restrictors in showerheads and faucets; close down automatic flushes overnight.
- (7) Install automatic flushing valves to use as little water as possible or to cycle at longer intervals.
- (8) Place water-saving posters and literature where employees, students, patients, customers', etc. will have access to them.
- (9) Check meters on a frequent basis to determine consumptive patterns.
- (10) Review usage patterns to see where other savings can be made.

(Ord. No. 11-04, § 1, 3-14-11)

Editor's note(s)—Ord. No. 11-04, § 1, adopted Mar. 14, 2011, repealed § 15B-13, in its entirety and enacted new provisions to read as herein set out. Prior to this amendment, § 15B-13 pertained to "Shortage water rates." See Code Comparative Table for derivation.

Sec. 15B-14. Enforcement of water rationing.

- (a) The city manager or the water utility department will have responsibility for monitoring of compliance with the water rationing ordinance.
- (b) The following provisions shall govern the implementation of temporary service interruptions:

- (1) In order to effectuate compliance with this ordinance, the city is hereby authorized to plan and implement temporary service interruption to all or part of its water supply system, as may be deemed appropriate, when any/or all of the following conditions are determined to exist:
 - a. The mandated reduction in system-wide water usage has been achieved; and/or
 - b. The mandated reduction in system-wide water usage has been achieved, but has failed to have a significant impact in extending limited water supplies; and/or
 - c. Temporary service interruptions are necessary in order to further extend limited and/or dwindling water supplies.
 - (2) In the event it is determined that temporary service interruptions are necessary, the city shall notify its customers through the public media (newspapers, radio, and television), at least one (1) day prior to the temporary service interruptions, that a planned, temporary service interruption is to be imposed. Such notice shall:
 - a. State the day or days when the planned, temporary service interruption will occur;
 - b. State the time(s) when such planned, temporary service interruptions will commence and the time(s) such interruption will cease;
 - c. State whether the planned, temporary service interruptions are to be imposed on the entire system, or part thereof, and, if only part(s) of the system, which parts will experience planned, temporary service interruptions.
 - (3) The city should advise by a general notice addressed to customers within the areas affected by planned, temporary service interruptions how to treat any water received from the system for human consumption during the period(s) of such interruptions and for such additional time as may be necessary until full pressure is restored to the system.
- (c) The provisions of the water shortage response ordinance will be enforced by City of Henderson personnel and local law enforcement. Violators may be reported on the city's phone line or by written notice to the mayor, city manager, or public utilities department.
 - (d) Meter reading schedules are authorized to be altered to assure adequate monitoring of compliance with this ordinance.
 - (e) Any residential or nonresidential water customer who exceeds the allotments established pursuant to this water rationing will be subject to the following excess-use administrative penalties.
 - (1) Excess use administrative penalties will be collected, computed in accordance with the following schedule:
 - (f) In addition to the excess use administrative penalty, noncompliance with the water rationing provisions of this chapter will result in the following:
 - (1) For the first excess use, a warning of possible discontinuation shall be issued to the customer.
 - (2) For the second or subsequent excess use, service to the customer may be interrupted or shut off for a period not to exceed forty-eight (48) hours, or, if the customer provides access, a flow restrictor may be installed in the customer's service line for the duration of the emergency. The cost incurred to interrupt or shut off and reinstate service, or to install and remove a flow restrictor, shall be assessed to the water customer. Before service to an individual may be terminated under this provision, actual notice of the intent to discontinue shall be given, which shall include notice that the customer may appear at designated time and place (within twenty-four (24) hours) for an informal hearing to show why service should not be discontinued.

(Ord. No. 11-04, § 1, 3-14-11)

Editor's note(s)—Ord. No. 11-04, § 1, adopted Mar. 14, 2011, repealed § 15B-14, in its entirety and enacted new provisions to read as herein set out. Prior to this amendment, § 15B-14 pertained to "Regulations." See Code Comparative Table for derivation.

Sec. 15B-15. Shortage water rates.

Upon the declaration of a water supply shortage as provided in sections 15B-3, 15B-4 or 15B-5 hereof, the city council of the city shall have the power to adopt shortage water rates by ordinance designed to conserve water supplies. Such rates may provide for, but not be limited to:

- (1) Higher charges per unit for increasing usage (increasing block rates);
- (2) Uniform charges for water usage per unit of used (uniform unit rate);
- (3) Extra charges for use in excess of a specified level (excess demand surcharge); or
- (4) Discounts for conserving water beyond specific levels. Nothing herein shall be construed to imply any limitations on the city's general rate adoption and/or amendment authority.

(Ord. No. 11-04, § 1, 3-14-11)

Editor's note(s)—Ord. No. 11-04, § 1, adopted Mar. 14, 2011, repealed § 15B-15, in its entirety and enacted new provisions to read as herein set out. Prior to this amendment, § 15B-15 pertained to "Civil Penalties." See Code Comparative Table for derivation.

Sec. 15B-16. Regulations.

Any person who violated the provisions of this chapter, who fails to carry out the responsibilities imposed by this chapter, or who impedes or interferes with any action undertaken or ordered pursuant to this chapter shall be subject to the following additional consequences:

- (1) If the mayor, city manager, director of public works, or other city official or officials charged with implementation and enforcement of this chapter or a water supply shortage resolution learns of any violation of any water use restriction imposed pursuant to this ordinance, a written notice of the record shall be affixed to the property where the violation occurred and mailed to the customer and to any other person known to the city who is responsible for the violation or its correction. Said notice shall describe the violation and order that is to be corrected, cured, or abated immediately or within such specified time as the city determines is reasonable under the circumstances. If the order is not complied with, the city may terminate water service to the customer subject the following procedures:
 - a. The city shall give the customer notice by mail that, due to the violation, water services will be discontinued with a specified time and that the customer will have the opportunity to appeal the termination by requesting a hearing scheduled before the city manager.
 - b. If such a hearing is requested by the customer charged with the violation, he or she shall be given a full opportunity to be heard before termination is ordered; and,
 - c. The city manager shall make findings of fact and order whether service should continue or be terminated.
- (2) A fee of fifty dollars (\$50.00) shall be paid for the reconnection of any water service terminated pursuant to subsection (a). In the event of subsequent violation, the reconnection fee shall be two

hundred dollars (\$200.00) for the second violation and three hundred dollars (\$300.00) for each additional violation.

- (3) Any customers may also be charged with any willful violation of this chapter and prosecuted in the General Courts of Justice. Any person charged and found guilty of violating the provisions of this chapter shall be guilty of a misdemeanor. Each day's violation shall constitute a separate offense. The penalty for violation shall be a maximum fine of fifty dollars (\$50.00) and/or imprisonment for not more than thirty (30) days.

(Ord. No. 11-04, § 1, 3-14-11)

Editor's note(s)—Ord. No. 11-04, § 1, adopted Mar. 14, 2011, repealed § 15B-16, in its entirety and enacted new provisions to read as herein set out. Prior to this amendment, § 15B-16 pertained to "Severability." See Code Comparative Table for derivation.

Sec. 15B-17. Civil penalties.

In addition to criminal prosecution, violation of this chapter may subject the offender to civil penalties in the amount of twenty-five dollars (\$25.00) per day, collectible in a civil action in the nature of debt.

(Ord. No. 11-04, § 1, 3-14-11)

Sec. 15B-18. Appeals.

Any customer or other person aggrieved by a decision or action imposing an excess-use civil penalty or other remedy for noncompliance with the requirements of this ordinance may appeal in accordance with the following provisions:

- (1) The customer or aggrieved party shall file a letter of appeal to city manager within ten (10) days of action to rebut the finding of a violation, or provide evidence of circumstances beyond the customer's control that resulted in the violation.
- (2) A record of evidence regarding disputed violations shall be kept, and a written notice of the city manager's final decision and action in such cases shall be provided to the customer or aggrieved party.

(Ord. No. 11-04, § 1, 3-14-11)

Sec. 15B-19. Return to normal.

When water shortage conditions have abated and the situation is returning to normal, water conservation measures employed during each phase should be decreased in reverse order of implementation. Permanent measures directed toward long-term monitoring and conservation should be implemented or continued so that the city will be in a better position to prevent shortages and respond to recurring water shortage conditions.

(Ord. No. 11-04, § 1, 3-14-11)

Sec. 15B-20. Effectiveness.

The effectiveness of the City of Henderson water shortage response plan will be determined by comparing the stated water conservation goals with observed water use reduction data. Other factors to be considered include frequency of plan activation, any problem periods without activation, total number of violation citations, desired reductions attained and evaluation of demand reductions compared to the previous year's seasonal data.

(Ord. No. 11-04, § 1, 3-14-11)

Sec. 15B-21. Revision.

The water shortage response plan will be reviewed and revised as needed to adapt to new circumstances affecting water supply and demand, following implementation of emergency restrictions, and at a minimum of every five (5) years. Further, the Kerr Lake Regional Water Advisory Board and the staff of the City of Henderson will review procedures following each emergency or rationing stage to recommend any necessary improvements to the plan to the Henderson City Council. The city manager is responsible for initiating all subsequent revision to be considered by the city council.

(Ord. No. 11-04, § 1, 3-14-11)

Sec. 15B-22. Severability.

If any provision of this chapter is declared unconstitutional, or the application thereof to any person or circumstance is held invalid, the constitutionality of the remainder of the ordinance and its applicability to other person and circumstances shall not be affected thereby.

(Ord. No. 11-04, § 1, 3-14-11)