#### **CHAPTER 50: WATER SHORTAGE RESPONSE**

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#### **GENERAL PROVISIONS**

## § 50.01 INTRODUCTION.

The purpose of this subchapter is to provide for the declaration of official stages of water supply shortage situations and the implementation of the respective voluntary, mandatory, and emergency (including water rationing) conservation measures and regulations throughout the town in the event a water supply shortage is likely to occur or has occurred. The Water Shortage Response Plan (WSRP), codified in §§ 50.15 through 50.99 of this code, is to be used in conjunction with this subchapter and prescribes penalties for conservation violations. This subchapter should be accessible to all personnel responsible for water supply shortage response at all times. In addition, this subchapter should be made available to the North Carolina Public Water Supply (NCPWS) upon request. In the event that

the information below should change or become dated, this subchapter shall be updated immediately.

(Ord. passed 10-9-2007; Ord. passed 6-8-2010)

## § 50.04 CONSERVATION PRICING RATES.

- (A) Upon the declaration of a water supply shortage, the Rose Hill Town Board of Commissioners shall have the power to adopt water supply shortage rates by ordinance designed to conserve water supplies.
- (B) The 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 permit of use (uniform unit rate);
- (3) Extra charges for use in excess of a specified level (excess demand/drought surcharge rates); or
- (4) Discounts for conserving water beyond specific levels. (Ord. passed 10-9-2007; Ord. passed 6-8-2010)

#### WATER SHORTAGE RESPONSE PLAN

## § 50.15 INTRODUCTION.

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. (Ord. passed 10-9-2007; Ord. passed 6-8-2010)

## § 50.16 AUTHORIZATION.

The Rose Hill Town Administrator shall enact the following water shortage response provisions whenever the trigger conditions outlined in § 50.19 are met. In his or her absence, the Public Utilities Director will assume this role.

Mrs. Angela Smith

Rose Hill Town Administrator

Phone: (910)-289-1339

E-mail: angela@townofrosehillnc.com

Mr. Blake Parker

Town of Rose Hill Public Utilities Director

Phone: (910) 284-0402

E-mail: <u>bparker@townofrosehillnc.com</u> (Ord. passed 10-9-2007; Ord. passed

6-8-2010)

## § 50.17 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 Duplin Times, PSA announcements on local radio and cable stations. Declaration of emergency water restrictions or water rationing will be communicated to all customers by any of the methods noted hereinabove or by telephone through use of reverse 911. (Ord. passed 10-9-2007; Ord. passed 6-8-2010)

## § 50.18 LEVELS OF RESPONSE.

Five levels of water shortage response are outlined below. The five levels of water shortage response are: voluntary reductions, mandatory reductions I and II, emergency reductions and water rationing. A detailed description of each response level and corresponding water reduction measures follow below:

In **Stage 1**, Voluntary Reductions: Water users are encouraged to reduce their water use and improve water use efficiency;

penalties apply however, for noWater supply conditions noncompliance. indicate a potential for shortage. All water users will be asked to reduce their normal water use by 5%. Customer education and outreach programs will encourage water conservation and efficiency measures including: irrigating landscapes a maximum of one inch per week; preventing water waste, including runoff and watering impervious surfaces; watering plants deeply to encourage root growth; washing only full loads in clothes and dishwashers; using spring-loaded nozzles on garden hoses; and identifying and repairing all water leaks.

In Stage 2, Mandatory Reductions I: Water users must abide by required water use reduction and efficiency measures; penalties apply for noncompliance. Water supply conditions are significantly lower than the seasonal norm and water shortage conditions are expected to persist. All customers are expected to reduce their water use by 10% in comparison to their previous month's water bill. In addition to continuing to encourage all voluntary reduction actions, the following restrictions apply: irrigation is limited to a half inch per week between 8PM and 8AM; outdoor use of drinking water for washing impervious surfaces is prohibited; and all testing and training purposes requiring drinking water (e.g. fire protection) will be limited.

In **Stage 3**, *Mandatory Reductions II: Same as Stage* 2. Customers must continue actions from all previous stages and further reduce water use by 20% compared to their previous month's water bill. All non-essential uses of drinking water are banned and garden and landscape irrigation must be reduced to the minimum amount necessary for survival. Additionally, in Stage 3, a drought surcharge of 1.5 times the normal water rate applies.

In **Stage 4**, Emergency Reductions: Water supply conditions are substantially diminished and pose an imminent threat to human health or environmental integrity. Customers must continue all actions from

previous stages and further reduce their water use by 25% compared to their previous month's water bill. A ban on all use of drinking water except to protect public health and safety is implemented and drought surcharges increase to 2 times the normal water rate.

In **Stage 5**, Water Rationing: Water supply conditions are substantially diminished and remaining supplies must be allocated to preserve human health and environmental integrity. The goal is to provide drinking water to protect public health (e.g. residences, residential health care facilities and correctional facilities). In Stage 5, all customers are only permitted to use water at the minimum required for public health protection. Firefighting is the only allowable outdoor water use and pickup locations for distributing potable water will be announced according to Rose Hill's Emergency Response Plan. Drought surcharges increase to 5 times the normal water rate.

(Ord. passed 10-9-2007; Ord. passed 6-8-2010)

## **§ 50.19 TRIGGERS.**

(A) Rose Hill's water source is groundwater. The following measurements of well pumping times and well levels in relationship to pump intake levels trigger entry into corresponding water restriction stages.

# **Stage** Well Operating Conditions 1 Pumping Time > 10 hrs.

20% reduction in seasonal normal distance from static water level and pump intake.

20% increase in pumping time for same output.

2 Pumping Time > 12 hrs.

40% reduction in distance from static water level and pump intake.

40% increase in pumping time for same output.

3 Pumping Time > 14 hrs.

60% reduction in distance from static water level and pump intake.

60% increase in pumping time for same output.

4 Pumping Time > 20 hrs.

80% reduction in distance from static water level and pump intake.

Water level at pump intake elevation.

When water shortage conditions (B) have abated and the situation is returning to normal. water conservation measures employed during each phase should be decreased reverse in order 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.

(Ord. passed 10-9-2007; Ord. passed 6-8-2010)

## § 50.20 ENFORCEMENT.

The provisions of the water shortage response plan will be enforced by the Town of Rose Hill utility department and police personnel. Violators may be reported to the Town's dedicated water conservation hotline.

(Ord. passed 10-9-2007; Ord. passed 6-8-2010)

## § 50.21 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 Town Hall for customers to view. A notice will be included in customer water bill notifying them of such. Also a draft plan will be published in *The Duplin Times*. All subsequent revisions to the draft plan will be published at least 30 days prior to an adoption vote by Rose Hill's Town Board of Commissioners.

(Ord. passed 10-9-2007; Ord. passed 6-8-2010)

## § 50.22 VARIANCE PROTOCOLS.

Applications for water use variance requests are available from the Town Utility Office. All applications must be submitted to the Utility Office for review by the Public Utilities Director 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 importance, economic purpose necessary use of drinking water) and the prevention of structural damage.

(Ord. passed 10-9-2007; Ord. passed 6-8-2010)

## § 50.23 EFFECTIVENESS.

The effectiveness of the Rose Hill 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. passed 10-9-2007; Ord. passed 6-8-2010)

## **§ 50.24 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 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 Rose Hill's Town Board of Commissioners. The Town of Rose Hill Public Utilities Director is responsible for initiating all subsequent revisions.

(Ord. passed 10-9-2007; Ord. passed 6-8-2010)

## § 50.99 PENALTY.

Citations are assessed according to the following schedule depending on the number of prior violations and current level of water shortage.

| Water<br>Shortage<br>Level              | First<br>Violation | Second<br>Violation  | Third<br>Violation   |
|---|--------------------|----------------------|----------------------|
| Voluntary<br>Reductions                 | N/A                | N/A                  | N/A                  |
| Mandatory<br>Reductions<br>(Stages 2&3) | Warning            | \$250                | *Disc. of<br>Service |
| Emergency<br>Reductions                 | \$250              | *Disc. of<br>Service | *Disc. of<br>Service |
| Water<br>Rationing                      | \$500              | *Disc. of<br>Service | *Disc. of<br>Service |

<sup>\*</sup>Disc. (abbreviation for "discontinuation")

Drought surcharge rates are effective in Stages 3, 4 and 5.

(Ord. passed 10-9-2007; Ord. passed 6-8-2010)