

## Water Shortage Response Plan

### Greene County (RWS) Water Corporation

This document directs the procedures to reduce potable water demand and supplement existing drinking water supplies upon the event that existing water supply sources become inadequate to meet current demands for potable water.

#### I. Authorization

The President of Greene County Water Corporation at the recommendation of the Greene County Public Works Director shall enact the following water shortage response provisions at the time that two of the trigger conditions outlined in Section IV are reached. In his or her absence, the County Manager shall assume this role.

#### II. Notification

The following notification methods shall be used to inform water system employees and customers of a water shortage declaration: notices at municipal buildings, notices on water bills, publish in local newspaper, public service announcement on local radio stations. Also, the water shortage response measures' requirement shall be communicated through the same sources as the declaration. The declaration of emergency water restrictions or water rationing shall be communicated to all customers by either a mailed or hand delivered notice.

#### III. Levels of Response

The table below defines five levels of water shortage response. The levels of water shortage response are: voluntary reductions, mandatory reductions I and II, emergency reductions and water rationing. Below, you shall find a description of each response level and corresponding water reduction measure.

<b>Stage</b>	<b>Response</b>	<b>Description</b>
1	Voluntary Reductions	Water users are encouraged to reduce their water use and improve water use efficiency; however, no penalties apply for noncompliance. Water supply conditions indicate a potential for shortage.
2	Mandatory Reductions I	Water users must abide 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.
3	Mandatory Reductions II	Same as in Stage 2
4	Emergency Reductions	Water supply conditions are substantially diminished and pose an imminent threat to human health or environmental integrity.
5	Water Rationing	Water supply conditions are substantially diminished and remaining supplies must be allocated to preserve human health and environmental integrity.

In Stage 1, Voluntary Reductions, all water users will be asked to reduce their normal water use by 7 %. 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, 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, all customers are expected to reduce their water use by 14 % in comparison to their previous month's water bill. In addition, the customer is to continue all voluntary reduction actions. The following restrictions apply: irrigation is limited to a half inch per week between 10 pm and 6 am; 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 II, all customers must continue actions from all previous stages and further reduce water by 21 % 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 1.25 times the normal water rate applies.

In Stage 4, Emergency Reductions, all customers must continue all actions from

previous Stages and further reduce their water use by 28% 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 1.6 times the normal water rate.

The goal of Stage 5, Water Rationing, is to provide drinking water to protect public health (e.g. residences, residential health care facilities and daycare 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 in the local newspaper. Drought surcharges increase to 3.2 times the normal water rate.

#### IV. Triggers

The Greene County Water Corporation'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
	25 % reduction in seasonal normal distance from static water level and pump intake
	25% increase pumping time for same output
2	Pumping time > 12 hrs
	45 % reduction in distance from static water level and pump intake
	45 % increase pumping time for same output
3	Pumping time > 15 hrs
	70 % reduction in distance from static water level and pump intake
	70 % increase pumping time for same output
4	Pumping time > 18 hrs
	80 % reduction in distance from static water level and pump intake
5	Water level at pump intake elevation

## V. Enforcement

The provisions of the water shortage response plan shall be enforced by the Greene County Manager and the Public Works Director for Greene County as well as law enforcement personnel. Violators may be reported to the Greene County Water Office at 252-747-2429. Citations are assessed according to the following schedule depending on the number of prior violations and current level of water shortage.

Water Shortage Level	First Violation	Second Violation	Third Violation
Stage 1	N/A	N/A	N/A
Stages 2 / 3	Warning	\$200	Service Disconnection
Stage 4	\$275	\$375	Service Disconnection
Stage 5	\$450	Service Disconnection	Service Disconnection

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

## VI. Public Comment

Customers will have the opportunity to comment on the provisions of the water shortage response plan. Notice will be given via local newspaper and the county website. This plan will be available for review at the Greene County water office for two weeks before final adoption by the Greene County Board of Commissioners.

## VII. Variance Protocols

Application for water use variance requests is available from the Greene County Water Office at 229 Kingold Blvd. Snow Hill NC. All applications must be submitted to the Greene County Water Office for review by the Greene County Manager and the Public Works Director, or their 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 and the prevention of structural damage.

## VIII. Effectiveness

The effectiveness of the Greene County Water Corporation 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.

## IX. 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 Greene County Board of Commissioners. The Public Works Director for Greene County is responsible for initiating all subsequent revisions.