

Water Shortage Response Plan
Town of Clarkton, North Carolina
Effective Date: June 1, 2018

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 Mayor of the Town of Clarkton shall enact the following Water Shortage Response Plan provisions whenever the trigger conditions outlined in Section IV are met. In his or her absence, or as designated by the Mayor, the Director of Public Works will assume this role.

Mr. Arthur E. Whedbee
Mayor
Phone: (910) 647-5961

Mr. Chris Hall
Director of Public Works
Phone: (910) 874-3702

II. Notification

The following notification methods will be used to inform water system employees and customers of a water shortage declaration: employee staff meetings, mailers, door hangers, public postings at the Town Hall, Library, Post Office, and notices on utility bills and/or publication in the local newspaper. Declaration of emergency water restrictions or water rationing will be communicated to all customers by either a mailed or hand delivered notice.

III. Levels of Response

Five levels of water shortage response are outlined in the table 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.

Stage	Response	Description
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 shall adopt the 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 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, 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 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 7PM and 7AM; 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, 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, 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.

The goal of Stage 5, Water Rationing, 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. Pickup locations for distributing potable water, should it become necessary, will be announced in the local newspaper. Drought surcharges increase to 5 times the normal water rate.

IV. Implementation Triggers

The Town of Clarkton's water source is ground water. The following measurements of well pumping times and well levels in relationship to pump intake levels shall trigger entry into the corresponding water restriction stage.

Stage	Well Operating Conditions
1	Pumping Time >10 hrs 20% reduction in seasonal normal distance from static water level and pump intake 20% increase pumping time for same output
2	Pumping Time >12 hrs 40% reduction in distance from static water level and pump intake 40% increase pumping time for same output
3	Pumping Time >14 hrs 60% reduction in distance from static water level and pump intake 60% increase pumping time for same output
4	Pumping Time >20 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 will be enforced by Town of Clarkton Director of Public Works with assistance from the Bladen County Sheriff's Department. Violators may be reported to the Town Hall at (910) 647-5961. 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
Voluntary Reductions	N/A	N/A	N/A
Mandatory Reductions (Stages 2 and 3)	Warning	\$100	Discontinuation of Service
Emergency Reductions	\$200	Discontinuation of Service	Discontinuation of Service
Water Rationing	\$400	Discontinuation of Service	Discontinuation of Service

NOTE: Drought surcharge rates are also effect for Stages 3, 4 and 5.

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 made available for public inspection at the Town Hall, 81 N. Elm Street, Clarkton NC. Secondly, a public hearing will be scheduled with notice printed on all customer water bills to collect comments on the draft. All subsequent revisions to the draft plan will be available at the Town Hall for public inspection at least 30 days prior to an adoption vote by Clarkton Board of Commissioners.

VII. Variance Protocols

Applications for water use variance requests are available at the Town Hall. All applications must be submitted to the Town Hall for review by the Director of Public Works 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/or the prevention of structural damage.

VIII. Effectiveness

The effectiveness of the Clarkton 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; (1) as needed to adapt to new circumstances affecting water supply and demand, (2) following implementation of emergency restrictions, and (3) 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 the Clarkton Board of Commissioners. The Town of Clarkton Director of Public Works is responsible for initiating all subsequent revisions.

X. Rescind Previous Plan

Adoption of this Water Shortage Response Plan shall hereby rescind any previously plan adopted by the Town of Clarkton.

This Water Shortage Response Plan shall become effective on the date it is adopted.

Adopted this 1st day of June , 2018

Arthur E Whedbee
Arthur E. Whedbee
Mayor

ATTEST:

Kentrina S Woods
Kentrina S. Woods
Clerk

Scheduled Review: June, 2023

Water Shortage Response Plan
Town of Clarkton, North Carolina

Water Use Reduction and Efficiency Measures

Why Should We Conserve Water?

- Water is a precious natural resource. Only about 1% of the earth's water is suitable and available for our water use. Groundwater aquifers can be diminished or exhausted if water is withdrawn faster than the rate at which they are naturally replenished. Many areas of North Carolina are already experiencing water supply shortages. If we want future generations to have enough water, conservation is essential.
- Water conservation can have a huge impact on water utility operations and costs. Lower water production rates translate to reduced operating costs. More importantly, by reducing the peak water demand on our system, the need for expensive capital projects (e.g. wells) to increase water supply capacity may be delayed or avoided, thus helping to hold down taxes.
- By using less water, you may save on water and sewer bills, and gas or electric bills as well. Reducing the use of hot water reduces the amount of energy required in heating the water.

In The Bathroom

- Don't let the water run when shaving or brushing your teeth; turn the faucet on only as needed, and lower the flow setting.
- Take showers instead of baths. Try to limit showers to 5 minutes.
- Install low-flow shower heads and use water saving devices in your toilet.
- Don't use the toilet as a waste basket
- Repair or replace leaking faucets and toilets.

In the Kitchen and Laundry

- Thaw frozen food in the refrigerator, rather than under running water.
- Store drinking water in the refrigerator to avoid trying to run it cool at the tap.
- Operate clothes washers and dish washers at fully loaded capacity.
- Don't use more dishwashing liquid than necessary. Excessively soapy water increases the amount of rinsing needed.

Outdoors

- Repair or replace leaking hoses and faucets. Use a hose nozzle that can be adjusted for the task at hand.
- Instead of hosing sidewalks and driveways, use a broom or leaf blower to remove debris.
- Use a shutoff nozzle on your hose when washing vehicles, patio furniture, etc. Avoid continuously running water.

Lawn Watering

- Water lawns during the early morning / late evening hours; before 7 a.m. or after 7 p.m., when there is less evaporation.
- Avoid watering on windy days.
- Use mulch in planted areas to help retain moisture and to fight weeds.

- Avoid operating automatic irrigation systems when rainfall has been adequate.