

WATER SHORTAGE RESPONSE PLAN
Town Of Magnolia, North Carolina
May 19, 2023

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 Town of Magnolia's Mayor 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 water ORC 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.

Stage	Response	Description
1	Voluntary	Water supply conditions indicate a potential for shortage. Water use and improved water use efficiency are encouraged. However, penalties will not apply.
2	Mandatory I	Water supply conditions are significantly lower than the seasonal norm and water shortage conditions are expected to remain. The water user is to adopt the required water use reduction and efficiency measures. Penalties shall apply for noncompliance.
3	Mandatory II	Same as in stage 2.
4	Emergency	Water supply conditions are substantially diminished and pose an imminent threat to human health or environmental integrity.
5	Water Rationing	Water supply conditions are critically 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 Town of Magnolia 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 Town of Magnolia utility department and police personnel. Violators may be reported to the Town Hall at 910-289-3205. 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	\$200	Disconnection of Service
Emergency Reductions	\$275	\$375	Disconnection of Service
Water Rationing	\$450	Disconnection of Service	Disconnection of Service

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. First, a draft plan will be furnished to each customer either by mail or hand delivered. A public hearing will be scheduled with notice printed on the water bills to collect comments on the draft. All subsequent revisions to the draft plan will be published at least 30 days prior to an adoption vote by the Town of Magnolia's Town Council.

VII. Variance Protocols

Applications for water use variance requests are available from the Town Hall at 113 Railroad St. All applications must be submitted to the Town Hall for review by the Mayor and ORC 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 Town of Magnolia 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 Town of Magnolia's Council. The Town of Magnolia's mayor is responsible for initiating all subsequent revisions.