

**Water Shortage Response Plan
Town of East Arcadia, North Carolina
January, 2009**

Updated July 24, 2019

The procedures herein are written to reduce potable water demand and supplement existing drinking water supplies whenever they are in danger of being inadequate to meet customer needs.

I. Authorization

The East Arcadia's Town Mayor is authorized to enact water shortage response provisions whenever the trigger conditions outlined in Section IV are met. In his absence, the Chief Operator will assume this role.

East Arcadia Town Mayor
Phone: (910)-641-6250

Town of East Arcadia Chief Operator
Cell Phone: (910) 655-4388

II. Notification

The following notification methods will be used to inform water system employees and customers of a water shortage declaration: notices at municipal buildings, notices in water bills. Required water shortage response measures will be communicated through *The Bladen Journal*, PSA announcements on local radio stations. Declaration of emergency water restrictions or water rationing will be communicated to all customers by telephone.

III. Levels of Response

Three levels of water shortage response are outlined in the table below. The three levels of water shortage response are: voluntary reductions, mandatory reductions, and emergency reductions. 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	Water users must abide by required water use reduction and

	Reductions I	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	Emergency Reductions	Water supply conditions are substantially diminished and pose an imminent threat to human health or 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 8PM and SAM; 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 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.

IV. Triggers

Example triggers for the Town of East Arcadia are provided below. The examples provide an outline of appropriate triggers for the Town of East Arcadia groundwater system.

The following measurements of well pumping times and well levels in relationship to pump intake levels trigger the following corresponding water restriction stages.

Stage	Well Operating Conditions
1	Pumping Time >10 hrs 20% reduction in normal footage between static water level and pump intake level. 20% increase pumping time for same output
2	Pumping Time >12 hrs 40% reduction in levels between static water level and pump intake level.

3	Pumping Time >14 hrs 60% reduction in levels between static water level and pump intake level.
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V. Enforcement

The provisions of the water shortage response plan will be enforced by the Town of East Arcadia's utility department personnel and sheriff personnel. 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	Warning	\$50	\$100
Mandatory Reductions {Stages 1}	Warning	\$100	Discontinuation of Service
Emergency Reductions	\$200	Discontinuation of Service	Discontinuation of Service

I. Public Comment

Customers will have an opportunity to comment on the provisions of the water shortage response plan. First, a draft plan will be made available to the town's customers at the East Arcadia Town Hall, as well as a general mailing of the draft. A public hearing will be scheduled with notice printed in all customer 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 East Arcadia's Town Council.

VII. Variance Protocols

Applications for water use variance requests are available from the Town of East Arcadia's Utility Department. All applications must be submitted to the Utility Office for review by the town mayor or his 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 Town of East Arcadia's 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, as required by the provisions of G.S. 143-355 (1). Further, a water shortage response planning group will review procedures following each emergency or rationing stage to recommend any necessary improvements to the plan to the East Arcadia's Town Council. The Town of East Arcadia's Mayor is responsible for initiating all subsequent revisions.