Yadkin County East Bend Water Shortage Response Plan

Yadkin County, North Carolina

November 27, 2023

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**

Yadkin County Assistant County Manager (Brock Hall) shall enact the following water shortage response provisions whenever the trigger conditions outlined in Section IV are met. In his absence, the

Distribution ORC (Terry Foster) will assume this role.

Mr. Brock Hall

Assistant County Manager

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Mr. Terry Foster

Distribution ORC

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E-mail: tfoster@yadkincountync.gov

**II. 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 and on the Yadkin County website

homepage. Required water shortage response measures will be communicated through

PSA announcements on local radio and cable stations, and on the Yadkin County website https://www.yadkincountync.gov/.

* Declaration of emergency water restrictions or water rationing will be communicated to all customers by telephone or door hangers if necessary.

**III. Levels of Response**

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

water shortage response is: 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 andimprove water use efficiency; however, no penalties apply fornoncompliance. Water supply conditions indicate a potentialfor shortage. |
| 2 | Mandatory Reductions I | Water users must abide with required water use reductionand efficiency measures; penalties apply for noncompliance.Water supply conditions are significantly lower than theseasonal norm and water shortage conditions are expected topersist. |
| 3 | Mandatory Reductions II | Same as in Stage 2 |
| 4 | Emergency Reductions | Water supply conditions are substantially diminished andpose an imminent threat to human health or environmentalintegrity. |
| 5 | Water Rationing | Water supply conditions are substantially diminished andremaining supplies must be allocated to preserve humanhealth 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 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, 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.

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.

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 and pickup

locations for distributing potable water will be announced according to Yadkin County’s

Emergency Response Plan.

**IV. Triggers**

Yadkin County East Bend water source is purchased from Winston Salem Forsyth County. The following measurements of pumping times triggers entry into corresponding water restriction stages.

|  |  |
| --- | --- |
| **Stage** | **Pump Operating Conditions** |
| 1 | Pumping Time > 15 hours (w/ 1 pump pumping) |
| 2 | Pumping Time > 18 hours (w/ 1 pump pumping) |
| 3 | Pumping Time > 20 hours (w/ 1 pump pumping) |
| 4 | Pumping Time > 22 hours (w/ 1 pump pumping) |
| 5 | Pumping Time exceeds 24 hours  |

**Return to Normal**

When water shortage conditions have abated and the situation is returning to normal,

water conservation measures employed during each phase should be decreased in

reverse order of 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.

**V. Enforcement**

The provisions of the water shortage response plan will be enforced by Yadkin County personnel and local law enforcement. Violators may be reported on the

County’s Phone line. 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 (Stage I & II) | Warning | $100 Fine | Discontinuation of Water Service |
| Emergency Reductions | $250 Fine | $500 Fine | Discontinuation of Water Service |
| Water Rationing | $500 Fine | Discontinuation of Water Service | Discontinuation of Water Service |

**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 will be available at Yadkin County Human Resource Building (Water Department) for customers to view upon request. A notice will be included in customer water bill notifying them of such. Also, a draft plan will be published on Yadkin County website.

**VII. Variance Protocols**

Applications for water use variance requests are available from the Yadkin County Human Resource Building (Water Department). All applications must be submitted to Yadkin County for review by the Assistant County Manager 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 Yadkin County 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 Yadkin County Commissioners.

The Yadkin County Assistant County Manager is responsible for initiating all subsequent revisions.