

**Water Shortage Response Plan
Town of Boone, North Carolina
March 6, 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 Boone Town Manager shall enact the following water shortage response provisions whenever the trigger conditions outlined in Section IV are met. In his absence, the Public Works Director will assume this role.

Mr. John Ward III
Boone Town Manager
Phone: (828) 268-6200
E-mail: John.Ward@townofboone.net

Mr. Ricky Miller
Town of Boone Public Works Director
Phone: (828) 268-6250
E-mail: rick.miller@townofboone.net

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. Required water shortage response measures will be communicated through *The Watauga Democrat*, PSA announcements on local radio and cable stations. Declaration of emergency water restrictions or water rationing will be communicated to all customers by telephone through use of reverse 911.

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 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	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	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 10% of average daily demand for the same calendar month each of the previous three calendar years. 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 all customers are expected to reduce their water use by 25% of average daily demand for the same calendar month each of the previous three calendar years. In addition to continuing to encourage all voluntary reduction actions, the following restrictions apply; 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, Water Rationing all customers must continue actions from all previous stages and reduce water use by 50% of average daily demand for the same calendar month each of the previous three calendar years. During a Stage III Water Shortage, medical facilities shall be the highest priority for available water. All commercial and industrial customers must fully cooperate with a water audit requested and scheduled by the Director or his designee. Following such audit, or if the customer has been previously audited, the customer must come into full compliance with the audit recommendations within ten days of the declaration of the water shortage or the audit, whichever is later, unless due to the cost of full compliance the Director, in writing, extends the time for full compliance to another date certain.

IV. Triggers

The Town of Boone's water source is the South Fork. The following stream flow measurements, intake levels and production capacities trigger entry into corresponding water restriction stages.

Stage	River Operating Conditions
1	Water level reading of <8.0 but >7.85 at Intake in South Fork and/or, Discharge at USGS Gage 03161000 is <300cfs for >14 days and/or >80% of Production Capacity for 3 consecutive days, or at any time as recommended by staff. (2 of 3 conditions must be met to declare Stage 1)
2	Water level reading of <7.85 but >7.60 at Intake in South Fork and/or, Discharge at USGS Gage 03161000 is <150cfs for >10 days and/or >90% of Production Capacity for 3 consecutive days, or at any time as recommended by staff. (2 of 3 conditions must be met to declare Stage 2)
3	Water level reading of <7.6 at Intake in South Fork, or Discharge at USGS Gage 03161000 is <50cfs or, 100% Production capacity on any day or at any time as recommended by staff. (Only 1 condition must be met to declare Stage 3)

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 Town of Boone utility department and police personnel. Violators may be reported to the Town's dedicated water conservation hotline. Citations are assessed according to the following schedule depending on the number of prior violations and current level of water shortage.

Penalties

A. The Director or the Director's designee may impose the following civil penalties for violation of the mandatory provisions of Section 50.309 of the Town of Boone Code of Ordinances (Stage II):

- | | |
|---------------------------------------|-----------|
| 1. First Offense | Warning; |
| 2. Second Offense | \$100.00; |
| 3. Third Offense | \$250.00; |
| 4. Fourth and Each Subsequent Offense | \$500.00. |

B. The Director or the Director's designee may impose the following civic penalties for violation of the mandatory provisions of Section 50.310 of the Town of Boone Code of Ordinances (Stage III):

- | | |
|--|-----------|
| 1. First Offense | \$200.00 |
| 2. Second Offense | \$500.00 |
| 3. Third Offense and Each Subsequent Offense | \$1000.00 |

4. In addition to these civil penalties, violations of a probation or requirement of a Stage III Water Shortage shall be a misdemeanor, pursuant to N.C. Gen. Stat. §14-4, punishable by a fine equal to the stated civil penalty up to a maximum of \$500.00, and imprisonment for each offense of up to thirty (30) days.

C. When a civil penalty has been imposed pursuant to this section, it must be paid within ten days following receipt of notification of the imposition of the penalty. Receipt is presumed three days after mailing by regular, first class mail. Thereafter, the penalty is automatically doubled and shall be added to the customer's monthly water bill.

D. In addition to the aforesaid civil and criminal penalties, the Town may disconnect a customer from the Town's water supply after two or more violations of Section 50.309 or 50.310 of the Town of Boone Code of Ordinances during any thirty-six month period or the duration of a water shortage declaration, whichever is longer. Should service be disconnected pursuant to this Article, a one hundred (\$100.00) dollar reconnect fee shall be imposed before service is restored. If three or more violations of Section 50.309 or 50.310 occur during any thirty-six month period or the duration of the water shortage declaration, whichever is longer, the Town may also, pursuant to the discretion of the Director, remove the customer's water meter, and in that event, all previously unpaid fees and deposits shall be forfeited. Reconnection thereafter shall only be made with the approval of the Town Manager. Before service is restored after the removal of the customer's water meter, in addition to the one hundred (\$100.00) dollar reconnect fee, the customer shall also be required to pay new tap fees and availability fees, and a deposit equal to twice the usual service deposit.

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 available at Town Hall for customers to view. A notice will be included in customer water bill notifying them of such. Also a draft plan will be published in *The Watauga Democrat*. All subsequent revisions to the draft plan will be published at least 30 days prior to an adoption vote by Boone's Town Council.

VII. Variance Protocols

Applications for water use variance requests are available from the Town Utility Office. All applications must be submitted to the Utility Office for review by the Public Works Director 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 Boone 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 Boone's Town Council. The Town of Boone Public Works Director is responsible for initiating all subsequent revisions.