

**City of Asheville, PWSID # NC 01-11-010**  
**Water Resources Department**  
**Water Shortage Response Plan**  
**Asheville, North Carolina**  
**May 31, 2018**

X. WATER SHORTAGE RESPONSE PLAN

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.

A. Authorization:

The City Manager of the City of Asheville is authorized to enact water shortage response provisions whenever the trigger conditions outlined in Section D. are met. The Manager will be advised by the Water Resources Director about the status of the water supply and the need to implement the water shortage provisions. In the absence of the Water Resources Director, the Water Production Division Manager will assume this role. Contact information for the Water Resources Director and Water Production Division Manager is presented below.

Water Resources Director  
City of Asheville  
PO Box 7148  
Asheville, NC 28802  
Phone: (828) 259-5955  
Email: [dmelton@ashevillenc.gov](mailto:dmelton@ashevillenc.gov)

Water Production Division Manager  
City of Asheville  
PO Box 7148  
Asheville, NC 28802  
Phone: (828) 271-6101  
Email: [lcarreiro@ashevillenc.gov](mailto:lcarreiro@ashevillenc.gov)

B. Notification:

The following notification methods will be used to inform water customers and system employees that the WSRP Voluntary Phase I has been enacted: (1) System Employees – email(s) and/or division meeting(s) and (2) Water Customers – local / regional media announcement(s) via press release(s) issued by the City, posting(s) on the City of Asheville Water Resources homepage at [www.ashevillenc.gov/departments/water](http://www.ashevillenc.gov/departments/water), and/or mailing(s) in the utility bills. City of Asheville Wholesale Customers will be notified via telephone, fax, email, and/or certified letter. The method(s) of notification will be determined by the Water Resources Director and/or the Water Production Division Manager, and will be timely and appropriate for the shortage situation.

The following notification method(s) will be used to inform water customers of Phase II Mandatory response measures: (1) System Employees – email(s) and/or division meeting(s); (2) public notification using local / regional media announcement(s) via press release(s) issued by the City, viable customer notification system; and/or (3) on the City of Asheville Water Resources homepage at [www.ashevillenc.gov/departments/water](http://www.ashevillenc.gov/departments/water). In

Phase III, declarations of rate surcharges (emergency water restrictions) will be communicated to all water customers using one or a combination of the methods referenced above. City of Asheville Wholesale Customers will be notified via telephone, fax, email, and/or certified letter to alert them of this declaration. Each of the Wholesale Customers will be required to implement the same level of restrictions as implemented by the City of Asheville.

**C. Levels of Response:**

The City of Asheville Water Resources Department has three levels of water shortage responses, which are: (1) Voluntary Reductions, (2) Mandatory Reductions, and (3) Emergency Restrictions (Surcharge). The established water rates for all customers are available from a Customer Service representative and can be found on the Water Resources Department Homepage at [www.ashevillenc.gov/departments/water](http://www.ashevillenc.gov/departments/water) under the section titled “Water Rates & Fees”. A description of each response level and corresponding water reduction measures are outlined in Table 1 below:

Table 1: Description of the water shortage response levels.

Phase	Response	Description
I	Voluntary	Water supply conditions indicate a potential for shortage. Water users are encouraged to reduce their water use and improve water use efficiency; however, no penalties apply for noncompliance.
II	Mandatory	Water supply conditions are significantly lower than the seasonal norm and water shortage conditions are expected to persist. Water users must abide by required water use reduction and efficiency measures; penalties apply for noncompliance.
III	Rate Surcharges (Emergency)	Water supply conditions are substantially diminished and pose an imminent threat to human health or environmental integrity. Remaining water supplies must be allocated to preserve human health and environmental integrity.

In **Phase I: Voluntary**, all water customers will be asked to reduce their normal water use by 5%. Water use is printed on all water utility bills, so water customers know how much water they typically use and are able to calculate how much a 5% reduction would be for their household / business. Water customers may also contact Customer Services at (828) 251-1122 to find out their consumption history. Customer Service representatives can suggest ways to conserve water. At any time, Water Resources staff may analyze any water customer’s consumption to see if they are reducing their water consumption by the suggested amount. Local / regional media announcement(s) via press release(s) issued by the City, posting(s) on the City of Asheville Water Resources homepage at [www.ashevillenc.gov/departments/water](http://www.ashevillenc.gov/departments/water), and/or mailing(s) in the utility bills will be used to encourage water conservation and efficiency measures including, but not limited to: irrigating landscapes a maximum of one inch per week; preventing watering of impervious surfaces; washing only full loads in the clothes and dish washers; taking shorter showers; and repairing water leaks. By implementing these reduction measures, the Water Resources Department would expect a reduction in water usage by

2% and would increase production at the Mills River Water Treatment Plant by an additional 3 MGD.

In Phase II: Mandatory, all water customers are expected to reduce their water use by a total of 10% in comparison to their previous water bill. Water use is printed on all water utility bills. Water customers are able to calculate how much a 10% reduction would be for their household / business. Water customers may also contact Customer Services at (828) 251-1122 to find out their consumption history. In addition to continuing to encourage all voluntary reduction actions, all non-essential uses of drinking water are banned. Garden / landscape irrigation must be reduced to the minimum amount necessary for survival; outdoor use of drinking water for washing impervious surfaces is prohibited; and all testing / training requiring drinking water (i.e. fire protection) will be limited. At any time, Water Resources staff may analyze any water customer's consumption to see if they are reducing their water consumption by the required amount. Local / regional media announcement(s) via press release(s) issued by the City; posting(s) on the City of Asheville Water Resources homepage at [www.ashevollenc.gov/departments/water](http://www.ashevollenc.gov/departments/water); and/or mailing(s) in the utility bills will be used to encourage mandatory reductions.

In Phase III: Rate Surcharges (Emergency), all water customers are expected to continue all actions from previous phases and reduce their water use by a total of 25% compared to their previous water bill. Water use is printed on all water utility bills. Water customers know how much water they typically use and are able to calculate how much a 25% reduction would be for their household / business. Water customers may also contact Customer Services at (828) 251-1122 to find out their consumption history. In Phase III, a ban on all use of drinking water except to protect public health and safety is implemented, and Rate Surcharges will be added at \$1.40 per CCF (1 CCF = 748 gallons) in addition to the established water rate(s) on the current fee schedule. At any time, Water Resources staff may analyze any water customer's consumption to see if they are reducing their water consumption by the required amount. Local / regional media announcement(s) via press release(s) issued by the City; posting(s) on the City of Asheville Water Resources homepage at [www.ashevollenc.gov/departments/water](http://www.ashevollenc.gov/departments/water); and/or mailing(s) in the utility bills will be used to encourage emergency reductions.

The goal of Phase III. is to provide drinking water to protect public health (i.e. residences, residential health care facilities and correctional facilities). In Phase III., all customers are restricted to using water at the minimum required for public health protection. Firefighting is the only allowable outdoor water use. If it becomes necessary to distribute potable water, the details will be announced through the City of Asheville Emergency Operations Center.

#### D. Triggers:

When the following specific triggers are met, the authority or authorities listed in Section A. will enact water shortage response provisions. Triggers and examples for the City are provided below in relationship reservoir system:

### 1. The City as a Reservoir System

The City's primary water source consists of two reservoirs. The phases of drought correspond with the lake elevation at the reservoir supplying the North Fork Water Treatment Plant. Burnette Lake has a full pool elevation of 2,601.4 feet. A list of each phase and the corresponding trigger and change in action are outlined in Table 2a below:

Table 2a: Description of triggers and associated change in action.

<b>Phase</b>	<b>Lake Elevation / Feet Below Full Pool</b>	<b>Change In Action</b>
I	2,572 / 29	Overall 2% reduction in demand; Mills River WTP increase production by 3MGD
II	2,571 / 30	Overall 4% reduction in demand
III	2,570 / 31	Over all 6% reduction in demand

The Water Resources Department will move from more conservative restrictions as water supply conditions improve as outlined in Table 2b below:

Table 2b: Description of less restrictive conservation levels based on lake level increases.

<b>Phase</b>	<b>Lake Elevation / Feet Below Full Pool</b>	<b>Change In Action</b>
III to II	2,571 / 30	Move from Phase III to Phase II when the lake level reaches 2,571
II to I	2,572 / 29	Move from Phase II to Phase I when the lake level reaches 2,572
I to none	2,601.4 / 0	No water use reduction when the lake reaches full pool

### 2. The City as a Run-of-River System

The City's Mills River Water Treatment Plant is only limited by the amount of water it can produce. The State has evaluated and approved this plant for a filter rate of 6.5 gpm / ft<sup>2</sup>, which equates to approximately 7.5 MGD. The plant has unlimited supply from the French Broad River.

#### E. Enforcement and Penalties:

The Water Policies call for a Rate Surcharge of \$1.40 per CCF (1 CCF = 748 gallons) in addition to the established water rate(s) on the current fee schedule. The provisions of the Water Shortage Response Plan will be enforced by the City of Asheville Water Resources and Police Departments. Violators may be reported by calling Customer Services at (828) 251-1122 or by contacting the authority or authorities listed in Section X.A. via mail, telephone, and/or email. Penalties are assessed depending on the water

shortage level as outlined in Table 3 below.

Table 3: List of the water shortage level and associated penalty.

<b>Phase</b>	<b>1st Violation</b>	<b>2nd Violation</b>	<b>3rd Violation</b>
Voluntary	None	None	None
Mandatory	Warning	\$250	Discontinuation of Service
Rate Surcharges (Emergency)	\$250	Discontinuation of Service	Discontinuation of Service

Penalties will be enforced consecutively from one phase to the next.

F. Public Comment:

The Water Shortage Response Plan was reviewed by the State and determined to be compliant with applicable laws and regulations. It was published on the Water Resources Department webpage at [www.ashevillenc.gov/departments/water](http://www.ashevillenc.gov/departments/water) for public review and comment. The public may address all comments to the contact(s) listed in Section A. of this plan. Public comment(s) will be considered but not necessarily implemented as determined by Water Resources staff.

The final plan will be incorporated into the Water Policies and considered in open session of the Asheville City Council. The plan will be available for review prior to the meeting at the Water Resources Department webpage, [www.ashevillenc.gov/departments/water](http://www.ashevillenc.gov/departments/water). Adoption of the Water Policies by the City Council will begin the implementation of this plan.

G. Variance Protocols:

Customers must request water restriction variances in writing to the Water Resources Director. A decision to approve or deny individual variance requests will be determined within two weeks of submittal after careful consideration of the following criteria: medical and/or health care requirements, 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. The Water Resources Director will notify the customer in writing of the decision to approve or deny the water restriction variance request.

H. Effectiveness:

The effectiveness of the City's Water Shortage Response Plan will be determined by comparing the stated water conservation goals with observed water use reduction data. Consumption data will be tracked and analyzed at least every 30 days to measure the plan effectiveness. 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.

**I. 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, an ad hoc Water Shortage Response Planning Work Group will review procedures following each Rate Surcharge (Emergency) phase to recommend any necessary improvements of the plan to the Water Resources Director. The Water Resources Director is responsible for initiating all subsequent revisions. Once the director initiates revisions to the plan, the Asheville City Council will review and adopt the updated plan in open session.