

ARTICLE 5

WATER SHORTAGE RESPONSE PLAN

SECTION 5.1 - PURPOSE

Publicly and privately owned water systems in North Carolina that are required to prepare a Local Water Supply Plan under General Statute 143-355(l) shall include a Water Shortage Response Plan (WSRP) outlining how the system will respond to drought or other water shortage emergencies and continue to meet essential public water supply needs during the emergency.

SECTION 5.2 - DEFINITIONS

In addition to the definitions provided in Article 1, the words defined in this section shall have the meaning herein ascribed:

Available Stream Flow: The flow at the Ivy River Raw Water Intake that will flow into the intake wet well. This is the total river flow minus any amount of said flow that cannot or will not flow freely into the intake wet well due to the topography of the stream bed.

Controlled Watering: Minimal watering required to conserve ornamental plants or vegetables by hand watering or manually operated fixed systems where such watering is fully supervised to prevent excess watering, runoff or waste during the watering process.

Emergency Use Restrictions: This is the most restrictive phase of the WSRP and is to be implemented when water supply shortages reach critically low levels. Only water uses that are absolutely essential are permitted during Emergency Use Restrictions. Penalties, fines and disconnection of water service apply to violations of Emergency Use Restrictions as outlined herein.

Mandatory Use Restrictions: This is Phase II of the WSRP and is divided into two sub-phases, Stage 1 and Stage 2 in order to provide flexibility in the application of mandatory water restrictions. Penalties, fines and disconnection of water service may apply to violations of mandatory conservation as outlined herein. Conservation measures taken during mandatory conservation are intended to reduce water use by 10 to 25 percent.

Total Production Capacity: The total amount of water that can be produced by the water system from all sources. This does not include water purchased from another system under any agreement or in emergency circumstances.

Voluntary Conservation: This Phase I of the WSRP is to be implemented when conditions indicate the potential for water supply shortages. Measures taken during this Phase are intended to reduce water use by 5 to 10 percent. Although there is no penalty for violations, voluntary conservation measures are

to be strongly encouraged or more stringent Mandatory Conservation may be imposed.

SECTION 5.3 - APPLICABILITY

The provision of this Article shall be applicable if and when a potable water shortage exists or is imminent, or if any other situation exists that threatens seriously to disrupt or diminish the municipal water supply including, but not limited to drought, waterline breaks or other large losses of water, contamination of the raw water supply, and extended power outages or other interruption in treatment plant operations.

SECTION 5.4 - AUTHORITY TO IMPLEMENT

If the availability of water so limits the water supply of the Weaverville Water System that unrestricted use of water may endanger the adequacy of water available to customers of the System the Public Works Director or, in the absence of the Public Works Director, the Operator in Responsible Charge (ORC) of the Ivy River Treatment Plant shall make a recommendation to the Town Manager or in the absence the Town Manager, the Mayor and he or she shall be responsible for enacting the Water Shortage Response Plan as outlined herein.

SECTION 5.5 - THREE PHASE RESPONSE PROGRAM

In the event of a water shortage or impending shortage as outlined herein the Town will respond based on the severity of the shortage and expected duration with the goal of bringing demand for drinking water in line with available supply.

The following three phase program is established for conservation purposes:

- Phase I - Voluntary Conservation
- Phase II - Mandatory Use Restrictions (MUR)
 - Stage 1 Mandatory Use Restrictions
 - Stage 2 Mandatory Use Restrictions
- Phase II - Emergency Use Restrictions

SECTION 5.6 - IMPLEMENTATION TRIGGERS AND RESPONSE

Each Phase shall be implemented as follows:

5.6.1 - Phase I - Voluntary Conservation

Triggers	Response
Average daily use exceeds 80% of total production capacity for a period of 7 consecutive days within a 30 day period and supplemental supply from Asheville is restricted or not available, or	<ul style="list-style-type: none"> • Public Works Director to report to Town Manager per Section 5.4. • Town Manager implements WSRP. • Town Manager to inform Town Council of situation.
System failure such as a water leak limits the ability to fill system reservoirs. Reservoir levels are maintained but not declining, or	<ul style="list-style-type: none"> • Notify local news media (Asheville Citizen-Times, WLOS-TV, etc.) and ask for public announcements. • Post notice at Town Hall. • Notify NCDENR that WSRP has been implemented.
Water plant operation is interrupted or limited on a temporary basis due to mechanical failure and adequate supplemental water is available from Asheville subject to Voluntary Conservation by the Asheville system, or	<ul style="list-style-type: none"> • Notify Weaverville, Reems Creek & Jupiter fire departments of WSRP implementation. • All notices listed above shall include the WSRP Phase of restriction and measures to be taken by the public to conserve water.
Any condition when the Town Manager and Public Works Director are in agreement that conditions warrant Voluntary Use Restrictions.	<ul style="list-style-type: none"> • Utilize water use reduction educational materials such as handouts and website if conditions is expected to continue for more than 30 days. • Begin monitoring per Section 5.10

5.6.2 - Phase II - Stage 1 Mandatory Use Restriction

Triggers	Response
Voluntary Conservation measures have been in place for at least 7 days and have failed to measurably reduce average daily consumption, or	<ul style="list-style-type: none"> • Same response as Phase I Voluntary Restrictions, plus • Town Manager will use CodeRED emergency notification system to inform customers of the Step 1, MUR and may repeat CodeRed announcements as necessary.
Any condition when the Town Manager, Public Works Director and Water Treatment ORC are in agreement that conditions warrant Stage 1 Mandatory Use Restrictions.	<ul style="list-style-type: none"> • Update all posted notices to include details of Step 1 MUR provisions and list schedule of penalties.

5.6.3 - Phase II - Stage 2 Mandatory Use Restriction

Triggers	Response
Average daily use exceeds 90% of total production capacity for a period of 5 consecutive days and supplemental supply from Asheville is restricted or not available and Voluntary Conservation measures or Stage 1 Mandatory Use Restrictions have been in place for at least 7 days, or	<ul style="list-style-type: none"> • Same response as Phase I Voluntary Restrictions, plus • Town Manager will use CodeRED emergency notification system to inform customers of the Stage 2, Mandatory Use Restrictions and will repeat CodeRed announcements on weekly basis. • Update all posted notices to include details of Stage 2, Mandatory Use Restrictions provisions and list schedule of penalties. • Contact all commercial and industrial users by personal visits or telephone and advise them of the details of Stage 2, Mandatory Use Restrictions and penalties. • Contact local homeowner's associations and ask them to include notice of water use restrictions in newsletters and e-mails to members.
Water demand from the Ivy River Treatment Plant exceeds 50% available stream flow at the raw water intake for 2 consecutive days after Stage 1 Mandatory Use Restrictions have been in place for 7 days, or	
System failure such as a water leak limits the ability to fill system reservoirs and reservoirs are declining. System failure is not expected to be corrected before system reservoirs drop below a one day supply at current daily demand rate, or	
Water plant operation is interrupted or limited on a temporary basis due to mechanical failure and water is available from Asheville but subject to Mandatory Use Restrictions by the Asheville system, or	
Any condition when the Town Manager, Public Works Director and Water Treatment ORC are in agreement that conditions warrant Stage 1 Mandatory Use Restrictions.	

5.6.4 - Phase III - Emergency Use Restriction

Triggers	Response
<p>Average daily use exceeds 95% of total production capacity for a period of 3 consecutive days and supplemental supply from Asheville is restricted or not available and Stage 2 Mandatory Use Restrictions have been in place for at least 7 days, or</p>	<ul style="list-style-type: none"> • Same response as Phase I Voluntary Restrictions, plus • Town Manager will use CodeRED emergency notification system to inform customers of the Emergency Use Restrictions and will repeat CodeRed announcements on weekly basis. • Update all posted notices to include details of Emergency Use Restrictitons provisions and list schedule of penalties. • Contact all commercial and industrial users and advise them of the details of Step 2 MUR provisions. • Contact local homeowner's associations and ask them to include notice of water use restrictions in newsletters and e-mails to members.
<p>Water demand from the Ivy River Treatment Plant exceeds 75% available stream flow at the raw water intake for 2 consecutive days after Phase II, Step 2 Mandatory Use Restrictions have been in place for 5 days, or</p>	
<p>Any condition that limits the ability to fill system reservoirs and system reservoir levels have dropped below a one day supply, or</p>	
<p>Water plant operation is interrupted or limited by mechanical failure, interruption time is undetermined and supplemental water is not available from Asheville or Emergency Use Restrictions are in place on the Asheville system, or</p>	
<p>Any condition by majority vote of Town Council in regular or special session upon recommendation by the Town Manager.</p>	

SECTION 5.7 - ESTABLISHMENT OF USE CLASSIFICATIONS

In order to facilitate a fair and equitable WSRP, every water use will be classified into one of three classifications as follows:

5.7.1 - Class I - Essential Water Uses

Table 5.7.1 - Essential Water Uses	
a. Domestic	<ul style="list-style-type: none"> Water necessary to sustain human life and the lives of domestic pets, and to maintain minimum standards of hygiene and sanitation, including necessary food preparation.
b. Health Care	<ul style="list-style-type: none"> Patient care and rehabilitation. The filling and operation of swimming pools for health care and rehabilitation purposes.
c. Public Use	<ul style="list-style-type: none"> Fire fighting. Water system flushing for health and public protection purposes.
d. All	<ul style="list-style-type: none"> The use of a minimal amount of water necessary to clean any surface which a health official has determined to be contaminated in a manner effecting health and safety. The washing of vehicles where the health and safety of the public requires frequent cleaning such as those that transport food and other perishables and vehicles used to transport sick or injured persons such as ambulances.

5.7.2 - Class II - Socially or Economically Important Uses

Table 5.7.2 - Socially or Economically Important Uses	
a. Domestic	<ul style="list-style-type: none"> Home water use including kitchen, bathroom and laundry use. Controlled watering or drip irrigation of vegetable gardens. Watering of trees, shrubs and flowering plants where necessary to preserve them by controlled watering or drip irrigation.
b. Commercial	<ul style="list-style-type: none"> Commercial vehicle washes and laundromats. Restaurants and hotels. Irrigation for commercial nurseries at a minimum level necessary to maintain stock. Controlled watering at a minimum rate necessary to establish vegetation following grading/building where such vegetation is required by law or regulation. Minimum amount required to maintain essential cooling operations.
c. Public Use	<ul style="list-style-type: none"> Filling and operation of public swimming pools which serve more than 25 residents. Testing and drills by the Fire Department performed in the interest of public safety when specifically approved by the Town Manager.
d. Industrial	<ul style="list-style-type: none"> Minimum use necessary to operate production facilities and maintain jobs. Minimum amount required to maintain essential cooling operations.
e. All	<ul style="list-style-type: none"> The cleaning or power washing of building exteriors prior to painting or repair and not solely for aesthetic purposes.

5.7.3 - Class III - Non-Essential Uses

Table 5.7.3 - Non-Essential Uses	
a. All	<ul style="list-style-type: none"> Ornamental uses such as fountains and artificial waterfalls. Filling and operation for recreational swimming pools which serving fewer than 25 residents and which are not open to the general public. Washdown of driveway and other impervious surfaces except as provided for in Section 5.6.1. Non-commercial washing of motor vehicles, campers, boats, etc. except as provided for in Section 5.6.1. Allowing any tap, hose or pipe to run open for any purpose.
b. Residential	<ul style="list-style-type: none"> Lawn irrigation. Automatic irrigation of trees, shrubs, and ornamental plants except when limited to one watering per week between the hours of 4 a.m. and 7 a.m.
c. Commercial	<ul style="list-style-type: none"> Serving water in restaurants except by request. Cooling systems that rely solely on evaporation.
d. Public Use	<ul style="list-style-type: none"> Irrigation of lawns, gardens, parks, playing fields and recreational areas.

SECTION 5.8 - USE RESTRICTIONS

Upon implementation of water restrictions Phase I through Phase III as outlined herein, all water usage by customers of the Weaverville Water System shall immediately respond by conserving water according to the following table. Any water system purchasing water from the Weaverville Water System shall implement similar conservation measures on said system or immediately discontinue using Weaverville water.

Use Class	Phase I Voluntary Conservation	Phase II Step 1 Mandatory Use Restrictions	Phase II Step 2 Mandatory Use Restrictions	Phase III Emergency Use Restrictions
Class 1. Essential	Voluntary Conservation	Voluntary Conservation	Voluntary Conservation	Additional Conservation
Class 2. Socially or Economically Important	Voluntary Conservation	Voluntary Conservation	Additional Conservation	Prohibited
Class 3. Non-Essential	Voluntary Conservation	Prohibited	Prohibited	Prohibited

SECTION 5.9 - ENFORCEMENT PENALTIES

5.9.1 - Penalties

The following penalties outlined in the following table shall be imposed for violations of the provisions of the Article.

Table 5.9.1 Penalties			
Offence	Phase I Voluntary Conservation	Phase II Steps 1 & 2 Mandatory Use Restrictions	Phase III Emergency Use Restrictions
FIRST	Issue Public Awareness Notice	Notice of Violation	\$100 Fine
SECOND	Issue Public Awareness Notice	\$100 Fine	\$ 500 Fine
THIRD	Issue Public Awareness Notice	\$ 250 Fine	Disconnection of Service
More than 3 Offenses	Issue Public Awareness Notice	Disconnection of Service	N/A

5.9.2 - Fines, Disconnection and Reinstatement

The Town Manager is hereby authorized to disconnect water service to any customer who repeatedly violates the provisions of this Article in accordance with the Penalties outlined herein.

All Fines prescribed for violations of this Water Shortage Response Plan shall be enforceable in the same manner as any other fees and charges for water service from the Town.

Should it become necessary to disconnect the water service from any premises in accordance with Table 5.9.1 said water service will not be restored until that Phase of the water restrictions have been lifted. Said service shall be subject to a Reconnection Fee in the same manner as a water service that has been terminated for non-payment.

SECTION 5.9 - MONITORING

The Weaverville water system is equipped with Supervisory Control and Data Acquisition Systems (SCADA) which continuously monitor critical data, including all system reservoirs, the level of the Ivy River at the intake, and water production and pumping flow rates. Monitored data is retained in historical files readily available for review and trending. The SCADA systems will be used as the primary source of data for monitoring of water supply conditions.

During any stage of implementation of the WSRP the Public Works Director and the Ivy River Treatment ORC shall monitor the effectiveness of any Phase of the

WSRP by reviewing water demand, weather forecasts, system reservoir levels, etc. in accordance with the following table:

Table 5.9 - System Monitoring	
WSRP Restriction Level	Review Schedule
Voluntary Conservation	Weekly
Stage 1, Mandatory Use Restrictions	Weekly
Stage 2, Mandatory Use Restrictions	Daily
Emergency Use Restrictions	Twice Daily

SECTION 5.10 - DURATION

Any water shortage declaration as provided herein shall remain in effect until it has been determined that water supplies and service conditions have returned to normal. The decision to issue, upgrade, downgrade or withdraw the level of declaration will be made in the same manner as described in Section 5.4 of this Article.

SECTION 5.11 - PUBLIC INPUT

Prior to any amendment to Article 5 of the Water Policies and Procedures, the Town Council shall designate a time to receive public comment on the Water Shortage Response Plan ("WSRP") or amendment thereto, provided further that the WSRP, or any amendment thereto shall be available for public inspection at Weaverville Town Hall for a period of at least 7 days prior to receiving public comment, and that notice of the public comment meeting has been made in accordance with North Carolina General Statutes sec. 160A-71.

SECTION 5.12 - VARIANCES AND VARIANCE CRITERIA

Any person, company or corporation (hereinafter "Applicant") requesting a variance from the requirements of the WSRP as contained in this Article may do so by following the hearing and appeal procedures set forth in Article I, Section 1.3 of the Water Policies and Procedures.

Variations from the provisions of Article 5 of the Water Policies and Procedures may be granted if the hearing authority, as determined in Section 1.3, of Article I of the Water Policies and Procedures, determines that there are special conditions specific to the applicant with regard to Use Class that are not applicable to the Use Class as a whole and that granting a variance will not adversely effect other users of

the system or cause the triggering of a more restrictive phase of the WSRP. In no case however, shall a NonEssential use of water be permitted during any period of Phase III -Emergency Use Restrictions.

Any variance granted under this Section shall become null and void if a more restrictive stage of the WSRP is implemented. Nothing in this Section shall prevent any Applicant from reapplying for the same or a different variance after any change in the WSRP to a more or less restrictive phase.

SECTION 5.13 - REVISIONS AND REVIEW

The Town Manager shall be responsible for reviewing the provisions of Article 5 of the Water Policies and Procedures and making recommendations to the Town Council for amendments thereto. Such review shall take place after implementation of any emergency restrictions, upon changes in available water supply such as water plant expansion or upon new interconnections with other approved systems, and otherwise at intervals not to exceed five (5) years.