

Water Shortage Response Plan

Town of Mooresville, North Carolina



June 2023

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April 2023

The purpose of this Water Shortage Response Plan (WSRP) is to outline existing procedures to be followed in the event of a water shortage due to short-term problems in water treatment or distribution as well as long-term issues such as drought. It specifies the voluntary and mandatory conservation measures to be implemented when specific stages of water shortage are identified. It also details methods by which the public is notified of the stages of water conservation, how existing ordinances are enforced, and variances that are permitted for certain users.

1. Implementation Authorization

The Town of Mooresville's (Town's) Town Manager has the responsibility of enacting this WSRP and has the authority to place the appropriate water conservation stages into effect upon notification of triggers by Catawba-Wateree Drought Management Advisory Group (CW-DMAG) or notification of a water supply shortage by the Water Resources Director. This authority is granted by the Chapter 24, Article III of the Town of Mooresville General Code of Ordinances -Emergency Water Conservation Plan Ordinance (the Ordinance). The adopted Ordinance can be found at https://library.municode.com/nc/mooresville/codes/code_of_ordinances. Secondary authority to enact this plan is held by the Water Resources Director.

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2. Notification

The following notification methods will be used to inform water system employees and customers of a water shortage declaration:

- employee e-mail announcements
- Reverse 911 Notification System, Connect CTY
- notices at municipal buildings (eg Town Hall, Public Library, Recreation Centers, etc)
- notices in water bills
- press releases
- Town website and social media pages such as Facebook and Twitter

Required water shortage response measures will be communicated at a minimum through PSA announcements on local radio and cable stations, on the Town's website and through social media. Declaration of emergency water restrictions or water rationing will be communicated to all customers by telephone through use of reverse 911.

3. Levels of Response

The Ordinance has five stages of levels of severity of water shortage which shall be enacted when water supplies have declined to levels that are deemed insufficient to protect the health and safety of the community without substantially curtailing water demands. Appendix A contains the Emergency Water

Conservation Plan Ordinance which specifies the activities permitted and prohibited during each stage of conservation, enforcement of each stage and variance request procedures.

These measures shall be enacted by the Town Manager when the stages of restrictive water use limit non-essential uses of water as the severity of the water shortage increases. Stages of water conservation will follow the CW-DMAG recommendations for water supply issues caused by drought. The triggers for these events are defined in Appendix C of the Catawba-Wataree Comprehensive Relicensing Agreement: Low Inflow Protocol (LIP). See <https://www.duke-energy.com/community/lakes/hydroelectric-relicensing/catawba> for more information.

The Town has agreed voluntarily to abide by the LIP trigger points as defined by the CW-DMAG. A summary of these trigger points and the corresponding Town water conservation stage are listed below.

Low Inflow Protocol (LIP) Stage	Town of Mooresville Water Conservation Stage
0	Stage 1: Voluntary Water Conservation Notification
1	Stage II: Water Conservation Alert
2	Stage III: Water Shortage Warning
3	Stage IV: Water Shortage Crisis
4	Stage IV: Water Shortage Emergency

In addition to the CW-DMAG triggers, the Town may need to implement the water conservation plan due to treatment supply disruption or mechanical distribution issues. If treatment supply disruption should occur, the Town may utilize the following triggers to establish the proper water conservation stage. The Water Resources Director shall evaluate the average daily water usage to determine if the restrictions are necessary.

Water Supply Available, percentage of full system capacity	Town of Mooresville Water Conservation Stage
90%-100%	No Restrictions Required
80%-89%	Stage 1: Voluntary Water Conservation Notification
70%-79%	Stage II: Water Conservation Alert
60%-69%	Stage III: Water Shortage Warning
50%-59%	Stage IV: Water Shortage Crisis
Less than 50%	Stage IV: Water Shortage Emergency

As capacity is restored and the CW-DMAG LIP reduces the conservation stage, the Town Manager may then reduce the severity of the conservation plan being implemented. The Water Resources Director shall monitor the water supply and the CW-DMAG LIP daily during water conservation restrictions and report any change in status to the Town Manager.

4. Enforcement

The Ordinance prescribes the following enforcement measures and penalties for violation of the water use restrictions put in place during Stages II, III, IV or V. Residential customers shall be fined \$100 per violation paid within 48 hours of its assessment. Non-residential customers shall be fined \$200 for the first violation, \$500 for the second violation and \$1,000 for the third and each successive violation. Any person, firm or corporation who makes a prohibited connection during Stages II, III, IV or V of a water emergency shall be charged with a Class 3 misdemeanor and fined no more than \$500.

The Water Resources Director is authorized to discontinue water service in the event a violation of the provisions of the Ordinance under Stages II, III, IV or V and shall give at least 2 days' notice. Compliance with these provisions shall be enforced by personnel of the Utilities Department, the Police Department and other such personnel as designated by the Town Manager.

5. Public Comment

Participation by the community in all aspects of water conservation is critical to the successful implementation of this Plan. The original WSRP and Ordinance underwent a public review process prior to adoption. A draft of this 2023 document was also made available to the public for review and comment.

6. Variance Protocols

Hospitals, nursing homes and health care facilities are encouraged to comply with all stages of water conservation and implement measures to reduce water use to the greatest extent possible. These facilities are permitted to survey their water usage requirements and substitute conservation measures as may be reasonably possible without endangering the health of their patients or residents.

Under Stages II and III, persons regularly engaged in the sale of plants, shrubbery, trees and flowers are permitted to use water for irrigation of their commercial stock. However, they are encouraged to implement measures to reduce water use to the greatest extent possible.

Residents or other commercial customers may apply for a variance through the Town Manager. In order for a variance to be considered, the applicant must provide the following information for consideration:

- a. The requested water usage quantity
- b. Demonstrated necessary use of drinking water
- c. Expected duration of usage beyond the conservation limits
- d. Any alternative source options that have been evaluated
- e. Estimated cost for implementation of the alternative water source options
- f. Estimated impact from not having the requested water quantity

Issuance of variances will be at the sole discretion of the Town Manager.

7. Effectiveness

The future effectiveness of the WSMP 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.

8. Revision

The Ordinance and this adopted WSMP will be reviewed on a regular basis to evaluate the effectiveness of the plan. The review shall occur at least every 5 years or after each implementation of Stage II: Water Conservation Alert or greater, whichever is sooner. In addition, the Town will continue to voluntarily comply with CW-DMAG Low Inflow Protocol, including future revisions.