



Town of Fuquay-Varina

Water Shortage

Response Plan

Department of Public Utilities

Original: January 22, 2008

Updated: January 16, 2024 / Michael Wagner

Contents

Section 1 – Purpose.....	2
Section 2 – Definitions.....	3
Section 3 – Annual Water Conservation Measures.....	4
Section 4 – Water Conservation Stage I, Water Shortage Warning	4
Section 5 – Water Conservation Stage II, Water Shortage Emergency	5
Section 6 – Water Conservation Stage III, Water Shortage Crisis.....	6
Section 7 – Regulations.....	7
Section 8 – Enforcement.....	7
Section 9 – Public Comment.....	8
Section 10 – Severability.....	8
Section 11 – Effective Date and Revision.....	9
Appendix A - ORDINANCE NO. M-08-01, 1-22-2008.....	16

TOWN OF FUQUAY-VARINA WATER SHORTAGE RESPONSE PLAN

The purpose of this Water Shortage Response Plan (WSRP) is to provide a framework for making water supply and conservation decisions during times when water supplies in the region may be low either due to drought conditions, water quality problems, or disruptions in facility operations. This Plan supplements the Town of Fuquay-Varina's Water Conservation Ordinance (Appendix A), which became effective in 2001 and was amended in January of 2008.

North Carolina Division of Water Resources recommends that all water utilities have a water shortage response plan in place should drought or other water emergencies occur; and as of July 1, 2009 all public and privately owned water systems subject to GS 143-355 (I) are required to have an approved WSRP as part of their Local Water Supply Plan (LWSP). Rules governing water use during droughts and water emergencies (15A NCAC 02E.0607) require specific items that must be included in those plans. This WSRP was developed in accordance with the Water Shortage Response Plan Guidelines provided by the Division of Water Resources (DWR).

The Town of Fuquay-Varina has previously determined that it is in the best public interest of the citizens of Fuquay-Varina to have such water conservation plan in place as set forth herein.

Section 1. Purpose: The purpose of this to provide for the declaration of official phases of water supply shortage situations and the implementation of voluntary and mandatory water conservation measures throughout the Fuquay-Varina system in the event a shortage is declared.

The purpose of this water shortage and conservation article is:

1. To implement permanent seasonal water conservation measures;
2. To provide for the declaration of increasingly serious stages of water shortages when the Town is notified by the major water suppliers that they have implemented water conservation requirements;
3. To define mandatory water conservation measures to be implemented during these various stages.

Fuquay-Varina is provided water solely by purchase from three sources – Harnett County, the City of Raleigh, and Johnston County. As of 2023, the maximum contracted purchase amounts from these sources are limited to 4.000 mgd, 1.750 mgd, and 1.500 mgd, respectively. Recognizing that not all systems may declare a water shortage at the same time, Fuquay-Varina elects to declare and coordinate a shortage when its water demand exceeds 90% of available supply for 3 consecutive days (Stage I), 90% of available supply for 5 consecutive days (Stage II), and 100% of its available supply for 1 consecutive day (Stage III). In the event a individual water supplier has declared a Water Shortage Warning or Stage 1, Water Shortage Emergency or Stage 2, or Water Shortage Crisis or Stage 3, Fuquay-Varina will seek to reduce its overall consumption or demand by 10% from that supplier for each respective trigger. In the event "all" sources have provided notification of a Water Shortage Warning or Stage 1, Water Shortage Emergency or Stage 2, or Water Shortage Crisis or Stage 3, Fuquay-Varina will implement Stages 1, 2, and or 3 in conjunction.

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 conservations 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.

The water shortage and conservation provisions of this article are intended to preserve the water resources of the Town under specific conditions so that the water demands for human consumption, sanitation and fire protection of its customers can be met as cost-efficiently as possible throughout the service area of the Town.

This article shall apply to all users connected directly or indirectly to the Town public potable water supply, regardless of whether the user is located within the Town corporate limits or outside of the Town corporate limits.

The specific objectives of the water shortage and conservation provisions of this article are as follows:

1. To establish the authority of the Town Board to declare water shortage conditions and to implement and enforce the procedures established in this article;
2. To establish mandatory water conservation measures;
3. To establish enforcement protocol for violations of mandatory water conservation measures outlined in this WSRP

Section 2. Definitions

The following words, terms and phrases, when used, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Contamination means the addition to any watershed area, reservoir, storage tank or distribution system of any substance or material that appears in an above-normal concentration or has a high nuisance or harmful effect on the consumer or the system.

Essential use means:

1. Use of water to sustain normal life and the lives of domestic pets, and to maintain minimum standards of hygiene and sanitation;
2. Use of water for patient health care and rehabilitation;
3. Firefighting, including certain testing and drills by the Fire Department if conducted in the interest of public safety and if approved by the Town Manager;
4. Health and public protection purposes, if specifically approved by health officials and the Town Manager, including flushing of water lines and hydrants.

Hand watering means the use of a hand-held watering device. The device can be attached to the end of a garden hose, but must be attended (and held in the hand of a person) at all times that watering is taking place.

Mandatory conservation means that conservation measures are not voluntary, and that if users fail to comply, they are subject to the penalties outlined in this article.

Potable water means the water in the Town water distribution system.

Rationing means procedures established by the Town to provide for the equitable distribution of critically limited treated water supplies in order to balance demand and limited availability and to ensure that sufficient treated water is available to preserve public health and safety.

User means any person using water for any purpose from the Town water distribution system, either directly or indirectly.

Water shortage means that conditions exist when the demands and requirements of water customers served by the Town cannot be satisfied without depleting the available supply of potable water or the available water supply to or below a critical level, such as the level at which the continued availability of water for human consumption, sanitation and fire protection is jeopardized. Conditions contributing to a water shortage may include, but are not limited to, the following:

1. Water supplies are below the level necessary to meet needs;

2. Water quality has been threatened due to a contamination situation;
3. Power outages or equipment malfunction;
4. Peak customer demands on the water system;
5. Inability to maintain adequate pressure and/or water supply throughout every portion of the Town water distribution system;
6. Natural disasters.

Section 3. Annual Water Conservation Measures

Every Town customer shall comply with the following schedule for the automated irrigation (sprinklers and irrigation systems) of outdoor landscaping, such as grass, shrubbery, trees, flowers and vegetable gardens, from May 1 through October 31 annually:

1. For customers whose address numbers end in an even digit, such watering shall be restricted to Tuesdays, Thursdays and Saturdays.
2. For customers whose address numbers end in an odd digit, such watering shall be restricted to Wednesdays, Fridays and Sundays.

Exceptions to these restrictions (on a temporary 45-day basis, with the payment of a permit fee) may be granted for landscapers or property owners engaged in establishing new grass seed, sod or landscaping on a site-by-site basis, by permit issued by the Town. Any person regularly engaged in the sale of plants shall be permitted to use water for such purposes. These annual restrictions do not apply to any citizens that utilize a drip irrigation system.

	Year-round Water Conservation	Water Shortage Response Stages		
		Stage 1	Stage 2	Stage 3
Outdoor Spray Irrigation	Three days per week	Three days per week	One day per week, Night only	None
Hand watering, drip irrigation, subsurface irrigation, athletic field maintenance	Allowed	Allowed	One day per week, Night only	None
Other outdoor water use such as pressure washing, car washing, filling/topping off swimming pools	Allowed	Business Only, No pool filling, Wash vehicles at home M-F Only	Recycled Car Wash Only, Therapy Pools Only	None
New Turf Watering Exception Permits	Allowed	Allowed	None	None
Indoor Water Use Restrictions		Reduce overall consumption by a total of 10 percent	Reduce overall consumption by a total of 20 percent	Reduce overall consumption by a total of 30 percent

Section 4. Water Conservation Stage I, Water Shortage Warning

- Whenever the Town experiences a potential Stage I water shortage, the Town Board shall be empowered to declare a water shortage warning. The goal of Stage I conservation measures is to reduce overall consumption by a total of ten percent.
- An extensive publicity campaign will be initiated with conservation efforts publicized through the general news media or any other appropriate method for making such notification public. When water shortage warning conditions are declared, the following mandatory conservation measures shall be imposed.

- It shall be unlawful to use water from the public water system supplied by the Town:
 - To water lawns, grass, shrubbery, trees, flowers and vegetable gardens except by the schedule in Section 3.
 - To wash down outside areas such as streets, driveways, service station aprons, parking lots, office buildings, exteriors of existing or newly constructed homes or apartments, sidewalks or patios, or to use water for other similar purposes; provided, however, that any person regularly engaged in the business of washing such areas shall be permitted to use water for such purposes.
- To wash vehicles at home on days others than Saturday or Sunday.
- To fill new pools or completely refill existing pools.

	Year-round Water Conservation	Water Shortage Response Stages		
		Stage 1	Stage 2	Stage 3
Outdoor Spray Irrigation	Three days per week	Three days per week	One day per week, Night only	None
Hand watering, drip irrigation, subsurface irrigation, athletic field maintenance	Allowed	Allowed	One day per week, Night only	None
Other outdoor water use such as pressure washing, car washing, filling/topping off swimming pools	Allowed	Business Only, No pool filling, Wash vehicles at home M-F Only	Recycled Car Wash Only, Therapy Pools Only	None
New Turf Watering Exception Permits	Allowed	Allowed	None	None
Indoor Water Use Restrictions		Reduce overall consumption by a total of 10 percent	Reduce overall consumption by a total of 20 percent	Reduce overall consumption by a total of 30 percent

Section 5. Water Conservation Stage II, Water Shortage Emergency

When the Town experiences a shortage of treated water, or when the water supply is not adequate to meet normal needs, the Town Board shall be empowered to declare a Stage II water shortage emergency. The declaration shall exist for the duration of the shortage or until it is declared to have ended by the Town. The goal of Stage II conservation measures is to reduce overall consumption by a total of 20 percent.

In the event of a Stage II water shortage emergency, in addition to the restrictions heretofore imposed, the following mandatory water conservation measures shall apply. It shall be unlawful to use water from the public water system supplied by the Town for the following purposes:

1. To water lawns, grass, shrubbery, trees, flower and vegetable gardens except by the following schedule:
 - a. Odd-numbered addresses may irrigate lawns and landscapes only between 12:00 midnight and 10:00 a.m. on Tuesdays.
 - b. Even-numbered addresses may irrigate lawns and landscapes only between 12:00 midnight and 10:00 a.m. on Wednesdays.
2. To wash any vehicle and equipment, except at a commercial facility that recycles its wash water.
3. Non-firefighting hydrant use is prohibited.
4. Any use of potable water in topping off swimming pools is prohibited.

5. No new water 45-day permits for grass or sod will be issued.

Exceptions to these restrictions are as follows:

1. Agricultural irrigation is allowed for the production of food or the maintenance of livestock.
2. Irrigation is allowed for commercial nurseries at a minimum level necessary to maintain stock.
3. Pools used by health care facilities can be filled.

	Year-round Water Conservation	Water Shortage Response Stages		
		Stage 1	Stage 2	Stage 3
Outdoor Spray Irrigation	Three days per week	Three days per week	One day per week, Night only	None
Hand watering, drip irrigation, subsurface irrigation, athletic field maintenance	Allowed	Allowed	One day per week, Night only	None
Other outdoor water use such as pressure washing, car washing, filling/topping off swimming pools	Allowed	Business Only, No pool filling, Wash vehicles at home M-F Only	Recycled Car Wash Only, Therapy Pools Only	None
New Turf Watering Exception Permits	Allowed	Allowed	None	None
Indoor Water Use Restrictions		Reduce overall consumption by a total of 10 percent	Reduce overall consumption by a total of 20 percent	Reduce overall consumption by a total of 30 percent

Section 6. Water Conservation Stage III, Water Shortage Crisis

Whenever the Town Board has declared a water shortage crisis and finds a need to provide for the equitable distribution of critically-limited treated water or water supplies to ensure that sufficient treated water is available to preserve public health and safety of the citizens, the Town may enforce a water rationing policy. Such rationing policy shall be approved by the Town Board at the time of the declaration of the water shortage crisis and should be reflective of the following criteria:

1. It is imperative that water customers achieve an immediate further reduction in water use in order to extend existing water supplies and, at the same time, assure that sufficient water is available to preserve the public health and sanitation and to provide fire protection service. This immediate further reduction in water usage is another step along a continuum of responses to any water shortage crisis. Should the crisis continue, further reductions in water usage may be required. It must be emphasized that additional usage reductions in the rationed area is a valid and attainable goal reflective of the conditions of the crisis. The goal of Stage III conservation measures is to reduce overall consumption by a total of 30 percent.
2. The policy must provide for equitable reductions in water usage and for equal sacrifice on the part of each water customer. The success of this policy depends on the cooperation of all water customers in the emergency area.
3. The policy must ensure that fire protection is maintained.
4. The policy shall make it unlawful to fail to act in accordance with the restrictions on potable water use or to attempt to evade or avoid such water rationing restrictions.

5. The policy may include additional measures of mandatory conservation controls such as a percentage reduction in consumption, termination of service to specific areas in the water system on a rotating basis, prohibition of all industrial uses of potable water, and the like, or whatever is necessary to protect the health and safety of the customers of the water system.
6. In the event of a Stage III water shortage crisis, the following mandatory water conservation measures shall apply. It will be unlawful to use water from the public water system supplied by the Town for the following purposes:
 - a. To water or sprinkle any lawn, grass, shrubbery, trees or flowers with potable water supplied by the Town.
 - b. To wash automobiles, trucks, boats, airplanes or any other type of mobile equipment, even at commercial facilities that recycle water.
 - c. All 45-day grass or sod permits are suspended.

	Year-round Water Conservation	Water Shortage Response Stages		
		Stage 1	Stage 2	Stage 3
Outdoor Spray Irrigation	Three days per week	Three days per week	One day per week, Night only	None
Hand watering, drip irrigation, subsurface irrigation, athletic field maintenance	Allowed	Allowed	One day per week, Night only	None
Other outdoor water use such as pressure washing, car washing, filling/topping off swimming pools	Allowed	Business Only, No pool filling, Wash vehicles at home M-F Only	Recycled Car Wash Only, Therapy Pools Only	None
New Turf Watering Exception Permits	Allowed	Allowed	None	None
Indoor Water Use Restrictions		Reduce overall consumption by a total of 10 percent	Reduce overall consumption by a total of 20 percent	Reduce overall consumption by a total of 30 percent

Section 7. Regulations

During the effective period of any Stage I water shortage, Stage II warning, emergency, or Stage III crisis, the Town is empowered to promulgate such regulations or policies as may be necessary to carry out the provisions of this article. The Town Manager, or his duly authorized agent charged with implementation and enforcement of this article, shall be and is hereby granted the authority to implement and enforce any of the treated water use restrictions.

The Town Board may implement, maintain and rescind any one or more of the above restrictions and to make them applicable during various times of the day as they deem appropriate to protect the public health, safety and welfare until it determines that the conditions requiring their imposition no longer exist.

Section 8. Enforcement

Any person who violates the provisions of this article, who fails to carry out the duties and responsibilities imposed by this article or who impedes or interferes with any action

undertaken or ordered pursuant to this article (hereinafter "violation") shall be subject to enforcement actions.

For the first violation, the following enforcement action shall apply:

Warning. Whenever the Town finds that any user has violated or is violating this article or any prohibition, limitation, or requirement contained in this article, that user may be contacted in person, by phone or by means of a door hanger stating the nature of the violation and to discontinue such violation immediately.

For the second violation or a continuation of a violation following a warning, the following enforcement action shall apply:

Citation. Whenever the Town finds that any user has committed a second violation (within one year of the first violation) or is continuing to violate this article or any prohibition, limitation, or requirement contained in this article following a warning (given within one year of the first violation), the Town Manager or his duly authorized agent is authorized to issue a citation to the violator. The citation will carry with it a \$50.00 fine for such violation. A subsequent or continuation of a violation that results in the issuance of another citation will carry with it a \$100.00 fine.

For the third and subsequent violation, the following enforcement actions shall apply:

1. Suspensions of service. Whenever the Town finds that any user has violated or is continuing to violate this article or any prohibition, limitation or requirement contained in this article for a third or subsequent time, then the Town Manager may terminate or restrict the water service at such place or premises where the violation occurs and may in addition thereto or in the alternative take such other appropriate legal action as provided by law.
2. At such time as the Town Manager is satisfied that the person is no longer in violation of any treated water use restrictions, the Town Manager shall reinstate the person's water service pursuant to the following:
 - a. After payment of a suspension/reconnection charge of \$200.00 following the first termination of service;
 - b. After payment of a suspension/reconnection charge of \$300.00 following the second termination of service;
 - c. After payment of a suspension/reconnection charge of \$500.00 following the third or subsequent termination of service;

In addition to the aforementioned enforcement action, the Town Board may discontinue treated water service indefinitely at such place or premises where four or more violations of this article occur.

Section 9. Public Comment

The Town will provide a public comment period to review revisions to the Water Shortage Response Ordinance. A public hearing date will be set and advertised at least ten (10) days prior to the public hearing. Interested citizens will be provided with the proposed ordinance revisions by request to the Town Clerk. After the public hearing comments have been taken into consideration, the City Council may adopt the revised ordinance.

Section 10. Severability

If any provision of this ordinance is declared unconstitutional, or the application thereof to any person or circumstance is held invalid, the constitutionality of the remainder of the ordinance and its applicability to other persons and circumstances shall not be affected thereby.

Section 11. Effective Date and Revision

This Ordinance shall take effect immediately upon adoption or passage by the Town of Fuquay-Varina's governing body.

The WSRP will be reviewed if there are new circumstances affecting water supply and/or demand, and following a Water Shortage declaration due to drought. If indicated by those reviews, or at a minimum of every five years as required by the provisions of GS 143-355 (l), the WSRP shall be updated. An opportunity for public comment will be provided for any update of the WSRP that specifically relates to the requirements imposed on the public before presentation to the Town Board of Commissioners for approval. The Town of Fuquay-Varina Department of Public Utilities Director (or designee) is responsible for initiating all WSRP updates.