

# **Pasquotank County Water System**

## **Water Shortage Plan**

### **June 2023**

In order to handle a water shortage in areas served by The Pasquotank County Water System the following stages of response have been adopted by The Pasquotank County Board of County Commissioners.

The Pasquotank County Manager with assistance from the staff of the water department will implement the water shortage plan. The activation of this plan will be announced directly to each water system employee by their supervisor. The water users will be notified with a note on their bill, signs posted at the water department and other locations, notices on the county cable TV, Channel 9, the local newspaper, and an individual notice may be mailed to each user.

The water department staff will monitor the condition of the water system and report to the County Manager the findings needed to make a decision to implement the water shortage plan. These findings will also determine the term and the necessary stages needed when implementing the plan.

The following is a list of conditions and necessary stages in order to reduce the water usage of the Pasquotank County Water System:

#### **STAGE I**

##### **DESCRIPTION:**

The Warning Stage shall be initiated when the following conditions exist:

1. Raw water production is less than 2.1 MGD.
2. Finished water production is less than 1.5 MGD.
3. The finished water shortage (clearwell) levels are equal to or less than 5 feet.
4. The elevated tank levels are less than 10 feet.

This stage shall require all the above to exist except for a situation where any of the above singularly or in combination last for more than three days. The restrictions to be imposed are listed below:

## **RESTRICTIONS:**

1. A publicity campaign will be initiated using public media and other methods to inform the public of the voluntary water restrictions.
2. All water users which are provided water by Pasquotank County will be encouraged to practice the following conservation measures:
  - a) Use shower for bathing rather than a bathtub whenever possible. Try to limit the time to four minutes.
  - b) Do not leave water running while shaving or washing dishes.
  - c) Run dishwashers and clothes washers only when fully loaded whenever possible.
  - d) Delay new landscaping and seeding until a later date whenever possible.
  - e) Limit existing lawn watering to only necessary for plants to survive.
  - f) Water shrubbery the minimum required, reusing household water whenever possible.
  - g) Limit car washing to a minimum.
  - h) Do not wash outside areas such as sidewalks, patios, siding, etc.
  - i) Install water saving devices in showerheads whenever possible.
  - j) Install water saving devices in toilets such as water filled plastic jugs or commercially available units.
  - k) Use disposable dishes when possible.
  - l) Limit hours of operation of county source water-cooled air conditioners.
  - m) We request that no pools be filled within the Pasquotank County Water System served area and absolutely no water will be sold for filling pools outside of the system.
  - n) We request that contractors' water usage be reduced where possible.
  - o) Pasquotank County Water Treatment Plant is to delay plans to wash and fill basins and other tanks whenever possible.

The following is a list of conditions and necessary stages in order to revert back to the normal water usage of the Pasquotank County Water System:

## **RESTRICTION REVERSAL:**

The Warning Stage shall be reversed when the following conditions exist for a period of three or more consecutive days:

1. Raw water production is more than 2.1 MGD.
2. Finished water production is more than 1.5 MGD.
3. The finished water storage (clearwell) levels are equal to or more than 5 feet.
4. The elevated tank levels are more than 10 feet.

## STAGE II

### DESCRIPTION:

The Danger Stage shall be initiated when the following conditions exist:

1. Raw water production is less than 2.0 MGD.
2. Finished water production is less than 1.25 MGD.
3. The clearwell levels are equal to or less than 3.5 feet.
4. The elevated tank levels are equal to or less than 8 feet.

This stage shall require all the above to exist except for a situation where any of the above singularly or in combination lasts for more than two days. The restrictions to be imposed are listed below.

### RESTRICTIONS:

1. It shall be unlawful to use water from the Pasquotank County Water System to water lawns, grass, shrubbery, trees, flower and vegetable gardens, except under the following conditions:
  - a) Such watering is to be done by hand held hose, container, or drip irrigation system.
  - b) Such watering is only allowed on Saturday and Sunday mornings between the hours of 6 am and 9 am.

In addition, the following will not be allowed:
2. Filling of newly constructed swimming and/or wading pools which have been drained. A minimal amount of water may be added to maintain continued operation of an existing pool.
3. Operation of county source water-cooled air conditioners or other equipment that does not recycle cooling water, except when health and safety are adversely affected.
4. Washing automobiles, trucks, trailers, campers, airplanes, or any type of mobile equipment including commercial washing establishments.
5. Washing 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 water use for other similar purposes.
6. Introduction of water into any ornamental fountain, pool or pond or make similar use of water except to keep fish alive in an existing pond.
7. Serving drinking water in restaurants, cafeterias, or other food establishments, except upon request.
8. Use of water from public or private fire hydrants for any purpose other than fire suppression or other public emergency or water department needs.
9. Use of water for dust control or compaction.
10. Use of water for any unnecessary purpose or intentional wasting of water.

11. Contractors are asked to reduce water usage to essential needs.
12. The use of single-use plates and utensils is encouraged in restaurants whenever possible.

The following is a list of conditions and necessary stages in order to revert back to the normal water usage of the Pasquotank County Water System:

#### **RESTRICTION REVERSAL:**

The Danger Stage shall be reversed when the following conditions exist for a period of two or more consecutive days:

1. Raw water production is more than 2.0 MGD.
2. Finished water production is more than 1.25 MGD.
3. The clearwell levels are equal to or more than 3.5 feet.
4. The elevated tank levels are equal to or more than 8 feet.

### **STAGE III**

#### **DESCRIPTION:**

The Emergency Stage shall be initiated when the following conditions exist:

1. Raw water production is less than 1.75 MGD.
2. Finished water production is less than 1.0 MGD.
3. The clearwell levels are equal or less than 2.5 feet.
4. The elevated tank levels are equal to or less than 3 feet.

This stage shall require all the above to exist except for a situation where any of the above singularly or in combination lasts for more than one day. The restrictions to be imposed are listed below:

#### **RESTRICTIONS:**

1. Use of water outside a structure for any use other than an emergency, a fire, or use by the water department to maintain the system is prohibited.
2. Operation of a county source evaporative air conditioning unit is not allowed.  
An Exception is made when health and safety are adversely affected.
3. Introduction of water into any swimming pool is not allowed.
4. Large industrial customers are asked to delay projects consuming large quantities of water where possible.
5. Whenever practical, fire trucks shall use raw water. (This shall be determined by the Fire Chief).
6. All customers, industrial and domestic, shall be asked to cut consumption in half so



that the minimum quantities required for health, welfare, and safety of the customers of the Pasquotank County Water System will be available.

7. Pasquotank County Water System shall investigate all other sources of water for use (both raw and finished) as a possible supply.
8. The use of water to clean dishes at any restaurant or eating establishment is not allowed.

The following is a list of conditions and necessary stages in order to revert back to the normal water usage of the Pasquotank County Water System:

#### **RESTRICTION REVERSAL:**

The Emergency Stage shall be reversed when the following conditions exist for a period of one or more days:

1. Raw water production is more than 1.75 MGD.
2. Finished water production is more than 1.0 MGD.
3. The clearwell levels are equal or more than 2.5 feet.
4. The elevated tank levels are equal to or more than 3 feet.

The Pasquotank County Code Enforcement Office will enforce the restrictions. A public hearing will be held by the Pasquotank County Board of Commissioners for the review and comment on this plan.

Variance request for this plan will be held at the Water Committee meeting with the Pasquotank County Board of Commissioners present. Variances will be reviewed considering public health and recommendations from the water committee.

The Pasquotank County Water Committee will review the effectiveness of this plan during its implementation at each Water Committee Meeting. The Water Committee will also review this plan at its first water committee meeting of each annual year. The effectiveness of the Pasquotank water shortage response plan will be determined by comparing the stated water conservation goals with observed water use reduction data.

#### **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.

## **ENFORCEMENT:**

The provisions of the water shortage response plan will be enforced by Pasquotank County Manager with assistance from the staff of the water department and police personnel. Violators may be reported to the County's dedicated water conservation hotline or the e-mail contact listed on the County's website, (Pasquotank.nc.us). Citations are assessed according to the following schedule depending on the number of prior violations and current level of water shortage.

<b>Water Shortage Level</b>	<b>First Violation</b>	<b>Second Violation</b>	<b>Third Violation</b>
Voluntary Reductions	N/A	N/A	N/A
Mandatory Reductions (Stages 2 & 3)	Warning	\$250	Discontinuation of Service
Emergency Reductions	\$250	Discontinuation of Service	Discontinuation of Service
Water Rationing	\$500	Discontinuation of Service	Discontinuation of Service

Drought surcharge rates are effective in Stages I, II, and III.

## **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 County Offices for customers to view. A notice will be included in customer water bills notifying them of such. Also a draft plan will be published in the Daily Advance Newspaper and on the Pasquotank County website. All subsequent revisions to the draft plan will be published at least thirty (30) days prior to an adoption vote by the Pasquotank County Commissioners.

## **VARIANCE PROTOCOLS:**

Applications for water use variance requests are available from the Pasquotank County website and Pasquotank County Water Office. All applications must be submitted to the Pasquotank County Water Office for review by the Water Superintendent 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.

**EFFECTIVENESS:**

The effectiveness of the Pasquotank water shortage 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.

**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 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 the Pasquotank County Commissioners. The Pasquotank County Water Superintendent and Water Committee are responsible for initiating all subsequent revisions.