

# WATER SHORTAGE RESPONSE PLAN TOWN OF BEULAVILLE

The purpose of this WATER SHORTAGE RESPONSE PLAN is to identify Town personnel responsible for implementation and actions to be implemented in the event of a water shortage affecting the customers and water supply of the Town of Beulaville. This plan addresses the different levels of water shortage, triggers for enacting water conservation measures, implementation of water restrictions and the warnings and penalties for customers who violate the water use restrictions.

After notification from the Beulaville Water System Operator, the Town Manager will be responsible for making recommendations to the Beulaville Board of Commissioners concerning implementation of measures to address water shortage issues. Appropriate measures will be taken based on the status of the Town's water resources. The Town Board will determine the appropriate Water Conservation Phase to be implemented based on current information regarding water supplies

A trigger is a specific indicator of the potential for and severity of a water shortage. Triggers based on accurate assessments of water supply are a community's best gauge of a water supply shortage. Different types of triggers are as follows:

1. Number of days of supply remaining
2. Ground water levels or daily pumping times
3. Pressure or water levels in storage tanks

Water can be classified based on the need for water treated to drinking water standards and the importance to the local community, especially in terms of the local economy. Three (3) water use classes are defined as follows (a more detailed classification may be obtained at Town Hall):

## **CLASS 1: ESSENTIAL WATER USE**

1. Domestic Use
  - a. Water necessary to sustain human life and lives of domestic pets, and to maintain minimum standards of hygiene and sanitation.
2. Health Care Facilities
3. Public Use
  - a. Firefighting, including testing and drills by the fire department if performed in the interest of public safety and if approved by the Town Board.
  - b. Flushing of sewers and fire hydrants as needed to ensure public health and safety and if approved by the Town Board.

**CLASS 2: SOCIALLY OR ECONOMICALLY IMPORTANT**

1. Domestic Use
  - a. Home water use including kitchen, bathroom, and laundry use
  - b. Minimal watering of vegetable gardens
  - c. Watering of trees where necessary to preserve them
2. Commercial, Agricultural, Industrial and Institutional uses

**CLASS 3: NON-ESSENTIAL USES**

1. Ornamental Purposes
2. Outdoor Non-Commercial Watering (Public or Private)

Three (3) water shortage response phases are defined as follows including triggers, actions and enforcement for each phase:

**VOLUNTARY CONSERVATION PHASE:** Conditions indicate the potential for water supply shortages, and voluntary conservation should be encouraged.

**A. TRIGGERS FOR INSTITUTING VOLUNTARY CONSERVATION**

1. A potential shortage for ground water systems is suspected when water levels in wells begin to drop below normal seasonal levels or when daily pumping times begin to exceed 12 hours to meet demand and maintain water system storage.
2. A potential shortage exists when tank levels are below normal seasonal levels. Water systems with water tank reservoirs should request voluntary conservation when less than 80% of the useable water supply storage is remaining. Water supply storage and demands will be assessed weekly.

**B. ENACTING VOLUNTARY CONSERVATION**

1. Inform the public about the potential problem via notice posted at Town Hall, advertise notice in local newspaper and/or other measures
2. Issue water shortage alerts
3. Set conservation goals and prepare for decreasing supply
4. Request voluntary conservation from all water users

**C. WARNINGS AND/OR PENALTIES**

1. All high water use customers may be contacted again to inform them the voluntary conservation phase has been enacted.

**MANDATORY RESTRICTION PHASE:** there are visible or measurable signs that supplies are significantly lower than the seasonal norm and are diminishing, and mandatory restriction measures must be imposed.

**A. TRIGGERS FOR DECLARING MANDATORY RESTRICTIONS**

1. Ground water systems may impose mandatory water use restrictions if water levels in wells drop markedly below normal seasonal levels or if daily pumping times consistently exceed 12 hours to meet demand and maintain water supply storage. Ground water systems will continue to check water levels in their wells weekly and monitor the number of hours each well has pumped daily.
2. Water systems with water tanks should impose mandatory water use restrictions when less than 60% of the useable water supply storage is remaining. Water supply storage and demands will be assessed twice a week.

**B. ENACTING MANDATORY RESTRICTIONS**

1. Inform the public about the problem via posted notice at town hall, advertised notice in local newspaper and/or other measures
2. Issue water shortage alert
3. Set increased conservation goals
4. Ban or restrict all Class 3 (non-essential) uses
5. Request voluntary conservation for all other water uses
6. Monitor compliance with the ban on use and enforce with necessary
7. Increase restrictions as necessary

**C. WARNINGS AND/OR PENALTIES**

1. First offense of non-compliance will be a letter sent to the customer
2. Second offense will be a \$100.00 fine for each violation. (A VIOLATION IS EACH TIME THE CUSTOMER IS NOTIFIED OF THE OFFENSE)
3. Third offense will be a \$300.00 fine and water service disconnected.

**EMERGENCY RESPONSE PHASE:** the system is experiencing a water shortage, the supply is clearly inadequate, and more stringent restriction measures must be imposed.

**A. TRIGGERS FOR ENACTING EMERGENCY RESPONSE PHASE**

1. If water levels drop to the level of the pump or if pumping cannot meet restricted water demands, a Water Shortage Emergency should be declared. Ground water systems should check water levels in their wells daily and reduce pumping times to allow water levels to recover to above-pump levels.
2. Water systems with water supply tanks should declare a Water Shortage Emergency when less than 40% of the useable water supply storage is remaining. Water supply storage and demands will be assessed daily.

## **B. ENACTING EMERGENCY RESPONSE PHASE**

1. Issue water shortage emergency declaration
2. Set increase conservation goals
3. Ban all Class 3 (non-essential) water uses
4. Ban or restrict Class 2 (socially and economically important) water uses
5. Request additional conservation from Class 1 (essential) users as may be possible
6. Monitor all drought activities, especially compliance with the bans and enforcement
7. Keep the public informed about the increase water shortage severity

## **C. WARNINGS AND/OR PENALTIES**

1. First offense will be a \$500.00 fine for each violation
2. Second offense water service will be disconnected

**PUBLIC COMMENT:** Customers will have multiple opportunities to comment on the provisions of the water shortage response plan. First, a draft plan will be published in *The Duplin Times* and on the Town of Beulaville website. A public hearing will be scheduled with notice printed in all customer water bills to collect comments on the draft. All subsequent revisions to the draft plan will be published at least thirty (30) days prior to an adoption vote by the Beulaville Board of Commissioners.

**VARIANCES:** Requests to mandatory restrictions will be submitted in writing to the Beulaville Board of Commissioners. The Board of Commissioners will make decisions on variance requests at the next regular board meeting, following submittal of the request. Requests for variances from mandated restrictions must be submitted at least one (1) week prior to a regularly scheduled board meeting. Variances will only be approved as follows:

1. Evidence of extreme hardship, as determined by the Board
2. Board findings that unusual circumstances justify the variance
3. Requests will be heard by the Board using quasi-judicial procedures

**EFFECTIVENESS** of the water shortage response protocols will be measured after implementation of mandatory restrictions. All triggers will be monitored to determine the status of the water resources and to determine if more restrictive measures are required. Routine monitoring will continue until water resources return to levels that do not call for mandatory restrictions. Protocol revision recommendations will be made by the town manager to the Board of Commissioners, based on the level of success of implemented measures. Further, effectiveness of the water shortage response 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.

**REVISIONS:** 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 the 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 Beulaville's Town Council. The Town of Beulaville Town Manager is responsible for initiating all subsequent revisions

The Town Board will determine the appropriate Water Conservation Phase to be implemented based on current information regarding water supplies. Public education will be the key to success during the different phases of water conservation. The public will be made aware by bill inserts, posted notice at Town Hall, and public notification in local newspapers before each phase is implemented. Water conservation tips and guidelines are available to the public at Town Hall.

Adopted this the \_\_\_\_ day of \_\_\_\_\_, 2010 at Beulaville, Duplin County, North Carolina.

\_\_\_\_\_  
(Signature)  
  
\_\_\_\_\_  
Mayor  
(Title)

CERTIFICATE OF RECORDING OFFICER

The undersigned duly qualified clerk of the Town of Beulaville does hereby certify: That the attached plan is a true and accurate copy of the Water Shortage Response Plan as regularly adopted at a legally convened meeting of the Town of Beulaville duly held on the 9<sup>th</sup> day of June, 2008; and further that such resolution has been fully recorded in the journal of proceedings and records in my office.

IN WITNESS WHEREOF, I have hereunto set my hand this 9<sup>th</sup> day of June, 2008.

\_\_\_\_\_  
(Signature of Recording Officer)  
  
\_\_\_\_\_  
Town Clerk  
(Title)

(SEAL)

TO: Beulaville Water Customers

FROM: Beulaville Town Manager

DATE:

REF: Update of Water Shortage Response Plan Available for Public Review

THE UPDATED WATER SHORTAGE RESPONSE PLAN - DRAFT FOR BEULAVILLE IS AVAILABLE FOR PUBLIC INSPECTION AT THE TOWN HALL. CUSTOMER COMMENTS SHOULD BE DELIVERED TO THE TOWN MANAGER WITHIN THIRTY (30) DAYS OF PUBLIC NOTICE.

THANK YOU