

WATER SHORTAGE RESPONSE PLAN

1. PURPOSE

The purpose of the Water Shortage Response Plan is to provide guidance to Public Utilities staff, County Administration, and the customers of the Brunswick County Public Utilities during periods of drought and other events that result in a shortage of potable water. The Water Shortage Response Plan is intended to provide a framework of steps and activities to be implemented as conditions require.

2. RESPONSIBILITY FOR DECLARATION OF A WATER SHORTAGE

The Director of Public Utilities or his representative is authorized to declare that a water emergency exists. Depending on the severity of the emergency, Stage 1 Stage 2, Stage 3, or Stage 4 response actions as described in this plan shall be imposed by the Director of Public Utilities. In the absence of the Director of Public Utilities, the County Manager shall be authorized to declare that a water emergency exists and implement water response actions when a water use restriction trigger is present.

3. SHORTAGE RESPONSE ACTION LEVELS

STAGE 1 – VOLUNTARY WATER CONSERVATION ALERT

Triggers

- A Stage 1 Voluntary Water Conservation Alert may be declared in the event of an immediate water shortage, as declared by state and/or local officials, or when there are three (3) consecutive days when water demand exceeds eighty percent (80%) of the total water plant production capacity. Water production capacity shall be defined as the maximum volume of water that meets or exceeds state and federal standards that the water treatment plant process can produce during a twenty-four (24) hour period. Water production capacity can vary depending on system component reliability and/or raw water conditions or availability.
- When transmission capacity within all, or a significant portion of, the water distribution system is unable to supply water demand without significant reduction in system pressures.
- When sufficient water is unavailable for essential uses needed to provide for and protect the health, safety, and welfare of the public.
- When the Lower Cape Fear Water and Sewer Authority (LCFWSA) declares a Stage 0 Raw Water Emergency.

Response Actions

- 1) All water users shall minimize non-essential use of water.
- 2) Outdoor irrigation is prohibited, except for:
 - a. Watering lawns and landscaping with automatic irrigation systems (spray irrigation, drip irrigation, etcetera) less than one inch of water per week, between the hours of 8:00 PM and 4:00 AM in accordance with the following schedule:
 - (a) No irrigating on Mondays (except for even addresses until 4:00 AM)
 - (b) Properties with odd-numbered addresses (ending in 1, 3, 5, 7, 9) and non-addressed facilities may irrigate during the consecutive 8-hour

period from 8:00 PM on Tuesday, Thursday, and Saturday through 4:00 AM the next morning

- (c) Properties with even-numbered addresses (ending in 2, 4, 6, 8, 0) may irrigate during the consecutive 8-hour period from 8:00 PM on Wednesday, Friday, and Sunday through 4:00 AM the next morning
 - b. Maintaining newly installed landscapes, lawns, and erosion control projects that are under a written warranty and that were initiated prior to the issuance of an Extreme Drought advisory, not to exceed the minimum rate necessary on the day of installation and for 60 days following installation, by means designed and operated to maximize water use efficiency and to prevent run-off and excessive watering if requested;
 - c. Using spray irrigation by wastewater effluent treatment systems according to permit conditions under the provisions of North Carolina Administrative Code 15A NCAC 02U .0100 and any successive rules and amendments;
 - d. Maintaining athletic fields with less than one inch of water per week between the hours of 8:00 PM and 4:00 AM;
 - e. Maintaining personal food gardens;
 - f. Maintaining existing landscape plantings at the minimum rate necessary, between the hours of 8:00 PM and 4:00 AM, using a hand-held container or hand-held hose;
 - g. Watering golf course tees, fairways, and greens by means of an automated irrigation system between the hours of 8:00 PM and 4:00 AM with less than one inch of water per week;
 - h. Syringing golf course tees and greens exhibiting visible signs of stress between the hours of 12:00 PM and 4:00 AM, at the minimum rate necessary; and
 - i. Maintaining plant inventories, by means designed and operated to maximize water use efficiency, at retail garden centers, garden centers within mass merchant stores, or other businesses with live plants as their stock in trade.
- 3) The use of water from fire hydrants is prohibited, except for:
- (a) Fighting fire and fire protection purposes;
 - (b) Testing or training if it is necessary to protect public safety and has been approved by Brunswick County Utilities; and
 - (c) Flushing of potable water lines to protect the public health.
- 4) The serving of water in eating and drinking establishments shall be done on customer request only.
- 5) Use shower for bathing rather than bathtub and limit shower to no more than five (5) minutes.
- 6) Do not leave faucets running while shaving, brushing teeth, rinsing or preparing food.
- 7) Inspect and repair all faulty and defective parts of faucets and toilets.
- 8) Install water saving showerheads and other water conservation devices.
- 9) Install water saving devices in toilets such as early closing flappers.

Water Use Reduction Goals

Under a Stage 1 Water Conservation Alert, the County will implement measures intended to reduce water below 80% of water plant production capacity. The County will also notify its wholesale water customers that they must follow the county Voluntary Water Conservation Alert Response Actions in their systems in accordance with the wholesale water agreement. The targeted customer groups shall be customers with irrigation meters, wholesale water customers, and multi-family projects with common area irrigation.

Non-compliance Fees

1 st Offense	Notification
2 nd Offense	Warning
3 rd Offense	Warning

All subsequent Water emergency offenses during a stage 1 water shortage - Warning

All notifications and warnings assessed in a Stage 1 water shortage shall count as a first offense when assessing non-compliance fees for subsequent stages.

STAGE 2 – MANDATORY WATER CONSERVATION ALERT

Triggers

- A Stage 2 Mandatory Water Conservation Alert may be declared in the event of an immediate water shortage, as declared by state and/or local officials, or when there are three (3) consecutive days when water demand exceeds ninety percent (90%) of the total water plant production capacity. Water production capacity shall be defined as the maximum volume of water that meets or exceeds state and federal standards that the water treatment plant process can produce during a twenty-four (24) hour period. Water production capacity can vary depending on system component reliability and/or raw water conditions or availability.
- When transmission capacity within all, or a significant portion of, the water distribution system is unable to supply water demand without significant reduction in system pressures.
- When sufficient water is unavailable for essential uses needed to provide for and protect the health, safety, and welfare of the public.
- When the North Carolina Drought Management Advisory Council (NCDMAC) designates Brunswick County as suffering from Extreme Drought (D3).
- When the Lower Cape Fear Water and Sewer Authority (LCFWSA) declares a Stage 2 Raw Water Emergency.

Response Actions

- 1) All water users shall minimize non-essential use of water.
- 2) Outdoor irrigation is prohibited, except for:
 - a. Watering lawns and landscaping with automatic irrigation systems (spray irrigation, drip irrigation, etcetera) less than one inch of water per week, between the hours of 8:00 PM and 4:00 AM in accordance with the following schedule:
 - i. No irrigating on Mondays (except for even addresses until 4:00 AM)
 - ii. Properties with odd-numbered addresses (ending in 1, 3, 5, 7, 9) and non-addressed facilities may irrigate during the consecutive 8-hour period from 8:00 PM on Tuesday, Thursday, and Saturday through 4:00 AM the next morning
 - iii. Properties with even-numbered addresses (ending in 2, 4, 6, 8, 0) may irrigate during the consecutive 8-hour period from 8:00 PM on Wednesday, Friday, and Sunday through 4:00 AM the next morning
 - b. Maintaining newly installed landscapes, lawns, and erosion control projects that are under a written warranty and that were initiated prior to the issuance of an Extreme Drought advisory, not to exceed the minimum rate necessary on the day of installation and for 60 days following installation, by means designed and operated to maximize water use efficiency and to prevent run-off and excessive

watering. Documentation verifying the installation date inclusive of digitally date-stamped photos, receipts, etcetera must be provided to Brunswick County if requested;

- c. Using spray irrigation by wastewater effluent treatment systems according to permit conditions under the provisions of North Carolina Administrative Code 15A NCAC 02U .0100 and any successive rules and amendments;
 - d. Maintaining athletic fields with less than one inch of water per week between the hours of 8:00 PM and 4:00 AM;
 - e. Maintaining personal food gardens less than ¼ acre;
 - f. Maintaining existing landscape plantings at the minimum rate necessary, between the hours of 8:00 PM and 4:00 AM, using a hand-held container or hand-held hose;
 - g. Watering golf course tees, fairways, and greens by means of an automated irrigation system between the hours of 8:00 PM and 4:00 AM with less than one inch of water per week;
 - h. Syringing golf course tees and greens exhibiting visible signs of stress between the hours of 12:00 PM and 4:00 AM, at the minimum rate necessary; and
 - i. Maintaining plant inventories, by means designed and operated to maximize water use efficiency, at retail garden centers, garden centers within mass merchant stores, or other businesses with live plants as their stock in trade.
- 3) The use of water for washing or cleaning of mobile equipment including automobiles, trucks, boats, and fleet vehicles is prohibited, except for:
- a. Operating commercial car washes that utilize the industry's best management practices for the efficient use of water and those that recycle, reclaim, or reuse a portion of their wash water in their daily operations and have reduced total water consumption by 10% below the amount used in the month prior to a NCDMAC Extreme Drought designation in the affected area;
 - b. Washing with a hand-held hose with an automatic shutoff device using less than five gallons per vehicle;
 - c. Cleaning new and used vehicles using less than five gallons per vehicle to prepare for display in a dealer's show room, upon receipt from the manufacturer or prior owner, and following a sale prior to delivery to the purchaser; and
 - d. Cleaning of construction, emergency, transport, or public transportation vehicles if necessary to preserve the functioning and operation of the vehicle.
- 4) The use of water for washing impervious and paved surfaces is prohibited, except for:
- a. Prewashing in preparation for painting, recoating, or sealing; and
 - b. Applying at the minimum rate necessary for sanitation and public health purposes.
- 5) The use of water for ornamental fountains, artificial waterfalls, misting machines, reflecting pools, and ornamental ponds is prohibited, except for the minimum amount of make-up water necessary to maintain aquatic life.
- 6) The use of water for power-washing of buildings and other structures is prohibited except by licensed commercial businesses or when necessary to meet federal, state, and local public health and safety requirements.
- 7) The use of water for flushing sewer lines is prohibited except when necessary to meet public health and safety standards.
- 8) The use of water from fire hydrants is prohibited, except for:
- i. Fighting fire and fire protection purposes;
 - ii. Testing or training if it is necessary to protect public safety and has been approved by Brunswick County Utilities; and

- iii. Flushing of potable water lines to protect the public health.
- 9) The filling of family, public, or private swimming pools, including wading pools, hot tubs, spas, and whirlpool tubs, is prohibited, except:
- For health and rehabilitative purposes as prescribed by a medical doctor or administered by a medical facility (documentation to be provided upon request); and
 - For the minimal amount of make-up water necessary to maintain a pool's structural integrity and filtration system (documentation to be provided upon request).
- 10) The serving of water in eating and drinking establishments shall be done on customer request only.
- 11) Water shall be applied at the minimum rate necessary to maintain effective dust and erosion control during the construction of roads and highways initiated prior to the declaration of an Extreme Drought by the NCMDAC.
- 12) Use shower for bathing rather than bathtub and limit shower to no more than five (5) minutes.
- 13) Do not leave faucets running while shaving, brushing teeth, rinsing or preparing food.
- 14) Use disposable and biodegradable dishes where possible.
- 15) Limit the use of clothes washers and dishwashers and, when used, operate fully loaded. Operate dishwashers outside of peak demand hours from 8:00 p.m. to 4:00 a.m.
- 16) Inspect and repair all faulty and defective parts of faucets and toilets.
- 17) Install water saving showerheads and other water conservation devices.
- 18) Install water saving devices in toilets such as early closing flappers.
- 19) Do not use water-cooled air conditioners from 4:00 am until 10:00am.

Water Use Reduction Goals

Under a Stage 2 Mandatory Water Conservation Alert, the County will implement measures intended to reduce water usage by ten percent (10%) from baseline conditions. The County will also notify its wholesale water customers that they must reduce water usage in their systems by ten percent (10%) in accordance with the wholesale water agreement. The targeted customer groups shall be customers with irrigation meters, wholesale water customers, and multi-family projects with common area irrigation. If the trigger is due to an NCDMAC Extreme Drought designation, water users shall reduce water use by at least 10% below the amount used in the month prior to in the affected area, while taking into account typical increases and decreases that may occur from month to month due to normal seasonal peak changes.

Non-compliance Fees

1 st Offense	\$50
2 nd Offense	\$200
3 rd Offense	\$300 and water disconnection

All subsequent Water emergency offenses during a stage 2 or higher water shortage
Director's discretion up to \$5000 and water disconnection

STAGE 3 – WATER SHORTAGE WARNING – MANDATORY RESTRICTIONS

Triggers

- A Stage 3 Water Shortage Warning with Mandatory Restrictions may be declared in the event of an immediate water shortage, as declared by state and/or local

officials, or when there are five (5) consecutive days when water demand exceeds ninety percent (90%) of the total water plant production capacity. Water production capacity shall be defined as the maximum volume of water that meets or exceeds state and federal standards that the water treatment plant process can produce during a twenty-four (24) hour period. Water production capacity can vary depending on system component reliability and/or raw water conditions or availability.

- When transmission capacity within all, or a significant portion of, the water distribution system is unable to supply water demand without significant reduction in system pressures.
- When sufficient water is unavailable for essential uses needed to provide for and protect the health, safety, and welfare of the public.
- When the North Carolina Drought Management Advisory Council (NCDMAC) designates Brunswick County as suffering from Exceptional Drought (D4).
- When the Lower Cape Fear Water and Sewer Authority (LCFWSA) declares a Stage 3 Raw Water Emergency.

Response Actions

- 1) All water users shall minimize non-essential use of water.
- 2) Outdoor irrigation is prohibited, except for:
 - a. Using spray irrigation by wastewater effluent treatment systems according to permit conditions under the provisions of North Carolina Administrative Code 15A NCAC 02U .0100 and any successive rules and amendments;
 - b. Watering personal food gardens less than $\frac{1}{4}$ acre between the hours of 8:00 PM and 4:00 AM, using a hand-held container, hand-held hose, a hose with an automatic shutoff device, or drip irrigation with an automatic shutoff device;
 - c. Maintaining existing landscape plantings at the minimum rate necessary, between the hours of 8:00 PM and 4:00 AM, using a hand-held container or hand-held hose;
 - d. Watering golf course tees, fairways, and greens by means of an automated irrigation system between the hours of 8:00 PM and 4:00 AM with less than one half ($\frac{1}{2}$) inch of water per week;
 - e. Syringing golf course tees and greens exhibiting visible signs of stress between the hours of 1:00 PM and 4:00 AM, at the minimum rate necessary;
 - f. Maintaining newly installed landscapes, lawns, and erosion control projects that are under a written warranty and that were initiated prior to the issuance of an Extreme Drought advisory, not to exceed the minimum rate necessary on the day of installation and for 28 days following installation, by means designed and operated to maximize water use efficiency and to prevent run-off and excessive watering. Documentation verifying the installation date inclusive of digitally date-stamped photos, receipts, etcetera must be provided to Brunswick County if requested; and
 - g. Maintaining plant inventories, by means designed and operated to maximize water use efficiency, at retail garden centers, garden centers within mass merchant stores, or other businesses with live plants as their stock in trade.
- 3) The use of water for washing or cleaning of mobile equipment including automobiles, trucks, boats, and fleet vehicles is prohibited, except for:
 - a. Operating commercial car washes that utilize the industry's best management practices for the efficient use of water and those that recycle, reclaim, or reuse a

- portion of their wash water in their daily operations and have reduced total water consumption by 20% below the amount used in the month prior to a NCDMAC Extreme Drought designation in the affected area;
- b. Cleaning new and used vehicles using less than five gallons per vehicle to prepare for display in a dealer's show room; and
 - c. Cleaning of construction, emergency, transport, or public transportation vehicles if necessary to preserve the functioning and operation of the vehicle as required by law.
- 4) The use of water for washing impervious and paved surfaces is prohibited, except for using the minimum rate necessary for sanitation and public health purposes.
 - 5) The use of water for ornamental fountains, artificial waterfalls, misting machines, reflecting pools, and ornamental ponds is prohibited, except for the minimum amount of make-up water necessary to maintain aquatic life.
 - 6) The use of water for power washing of buildings and other structures is prohibited.
 - 7) The use of water for flushing sewer lines is prohibited except when necessary to meet public health and safety standards.
 - 8) The use of water from fire hydrants is prohibited, except for:
 - i. Fighting fire and fire protection purposes; and
 - ii. Flushing of potable water lines to protect the public health.
 - 9) The filling of family, public, or private swimming pools, including wading pools, hot tubs, spas, and whirlpool tubs, is prohibited, except for health and rehabilitative purposes as prescribed by a medical doctor or administered by a medical facility (documentation to be provided upon request);
 - 10) The serving of water in eating and drinking establishments shall be done on customer request only.
 - 11) Water shall be applied at the minimum rate necessary to maintain effective dust and erosion control during the construction of roads and highways initiated prior to the declaration of an Extreme Drought by the NCMDAC.
 - 12) Use shower for bathing rather than bathtub and limit shower to no more than five (5) minutes.
 - 13) Do not leave faucets running while shaving, brushing teeth, rinsing or preparing food.
 - 14) Use disposable and biodegradable dishes where possible.
 - 15) Limit the use of clothes washers and dishwashers and, when used, operate fully loaded. Operate dishwashers outside of peak demand hours from 8:00 p.m. to 4:00 a.m.
 - 16) Inspect and repair all faulty and defective parts of faucets and toilets.
 - 17) Install water saving showerheads and other water conservation devices.
 - 18) Install water saving devices in toilets such as early closing flappers.
 - 19) Do not use water-cooled air conditioners from 4:00 am until 10:00am.

Water Use Reduction Goals

Under a Stage 3 Water Shortage Warning with Mandatory Restrictions, the County will implement measures intended to reduce water usage by twenty percent (20%) from baseline conditions. The County will also notify its wholesale water customers that they must reduce water usage in their systems by twenty percent (20%) in accordance with the wholesale water agreement. If the trigger is due to an NCDMAC Extreme Drought designation, water users shall reduce water use by at least 20% below the amount used in the month prior to in the affected area, while taking into account typical increases and decreases that may occur from month to month due to normal seasonal peak changes.

Non-compliance Fees

1st Offense \$100

2nd Offense \$400

3rd Offense \$600 and water disconnection

All subsequent Water emergency offenses during a stage 2 or higher water shortage
Director's discretion up to \$5000 and water disconnection

STAGE 4 – WATER SHORTAGE DANGER – MANDATORY RESTRICTIONS

Triggers

- A Stage 4 Water Shortage Danger with Mandatory Restrictions may be declared in the event of an immediate water shortage, as declared by state and/or local officials, or when there is one day when water demand exceeds one hundred percent (100%) of the total water plant production capacity. Water production capacity shall be defined as the maximum volume of water that meets or exceeds state and federal standards that the water treatment plant process can produce during a twenty-four (24) hour period. Water production capacity can vary depending on system component reliability and/or raw water conditions or availability.
- When transmission capacity within all, or a significant portion of, the water distribution system is unable to supply water demand without significant reduction in system pressures.
- When sufficient water is unavailable for essential uses needed to provide for and protect the health, safety, and welfare of the public.
- When the Lower Cape Fear Water and Sewer Authority (LCFWSA) declares a Stage 4 Raw Water Emergency.

Response Actions

- 1) All water users shall minimize non-essential use of water.
- 2) Outdoor irrigation uses from the public water supply are prohibited, including but not limited to:
 - a. Watering by automatic spray irrigation and non-automatic spray irrigation systems;
 - b. Watering by hose end sprinklers and drip irrigation systems;
 - c. Watering by hand-held hoses and containers;
 - d. Watering personal food gardens;
 - e. Watering existing and new landscape plantings and lawns;
 - f. Watering any and all portions of golf courses (tees, fairways, greens, etcetera);
 - g. Watering erosion control projects;
 - h. Watering commercial, industrial, and institutional projects,Except for the maintaining of plant inventories, by drip irrigation techniques designed and operated to maximize water use efficiency, at retail garden centers, garden centers within mass merchant stores, or other businesses with live plants as their stock in trade is expressly allowed.
- 3) Using spray irrigation by wastewater effluent treatment systems according to permit conditions under the provisions of North Carolina Administrative Code 15A NCAC 02U .0100 and any successive rules and amendments is permitted.;

- 4) The use of water for washing or cleaning of mobile equipment including automobiles, trucks, boats, and fleet vehicles is prohibited;
- 5) The use of water for washing impervious and paved surfaces is prohibited;
- 6) The use of water for ornamental fountains, artificial waterfalls, misting machines, reflecting pools, and ornamental ponds is prohibited;
- 7) The use of water for power washing of buildings and other structures is prohibited;
- 8) The use of water for flushing sewer lines is prohibited except when necessary to meet public health and safety standards.
- 9) The use of water from fire hydrants is prohibited, except for:
 - i. Fighting fire and fire protection purposes; and
 - ii. Flushing of potable water lines to protect the public health, but only as approved by the Director of Public Utilities or his designee;
- 10) The filling and topping off of family, public, or private swimming pools, including wading pools, hot tubs, spas, and whirlpool tubs, is prohibited;
- 11) The serving of water in eating and drinking establishments shall be done on customer request only;
- 12) Using water to control or compact dust is prohibited;
- 13) Industrial customers shall reduce water usage by no less than 20%;
- 14) Use shower for bathing rather than bathtub and limit shower to no more than five (5) minutes.
- 15) Do not leave faucets running while shaving, brushing teeth, rinsing or preparing food.
- 16) Use disposable and biodegradable dishes where possible.
- 17) Limit the use of clothes washers and dishwashers and, when used, operate fully loaded. Operate dishwashers outside of peak demand hours from 8:00 p.m. to 4:00 a.m.
- 18) Inspect and repair all faulty and defective parts of faucets and toilets.
- 19) Install water saving showerheads and other water conservation devices.
- 20) Install water saving devices in toilets such as early closing flappers.
- 21) Operating water-cooled air conditioners is prohibited except when health and safety are adversely affected.

Water Use Reduction Goals

Under a Stage 4 Water Shortage Danger with Mandatory Restrictions, the County will implement measures intended to reduce water usage by twenty percent (20%). The County will also notify its wholesale water customers that they must reduce water usage in their systems by twenty percent (20%) in accordance with the wholesale water agreement.

Non-compliance Fees

1 st Offense	\$200
2 nd Offense	\$500
3 rd Offense	\$1000 and water disconnection

All subsequent Water emergency offenses during a stage 2 or higher water shortage
Director's discretion up to \$5000 and water disconnection

4. NOTIFICATION PROCEDURES

Upon declaration of each stage of water shortage emergency, the following methods may be used to inform the County staff, wholesale customers, County retail customers, and industrial customers.

PUBLIC NOTICE

The Public Utilities Department staff will draft a Public Notice announcing the Water Shortage Stage and the response actions that water customers must take to comply with the Water Shortage Response Plan. The Public Notice will be provided by the County's Communications Officer to all relevant media outlets that serve the Brunswick County area and shall be promoted on social media pages. Text notification services (ReadyBrunswick) may also be used for customer notification. Depending on the length of the water shortage and stage, paid public outreach through advertisements may be used for notification of the public. The Public Notice will include phone numbers that customers may call with questions.

WHOLESALE CUSTOMER NOTIFICATION

A copy of the Public Notice will be e-mailed to the Director of Public Utilities of all of the County's wholesale customers. The Deputy Director of Water Operations or his authorized representative shall call each wholesale customer to confirm the receipt of the Public Notice and to respond to any questions about the notice.

TRAINING COUNTY STAFF

A copy of the Public Notice will be provided to the Utility Billing Division staff members, Northwest Water Treatment Plant staff, 211 Water Treatment Plant staff, King's Bluff Pump Station staff, dispatchers, Construction Division staff, and Water Distribution Division staff. Depending on the stage, a list of Frequently Asked Questions with the recommended responses will be provided to the staff likely to receive calls from the public.

DIRECT MAILING TO CUSTOMERS

Depending on the stage and severity of the event, the County may elect to send a direct mailing to all County water customers. In the event of an immediate need to reduce water consumption, a notice may be sent to all water customers. If the need for water conservation is anticipated, an insert to the water bill may be the method of communication.

5. COMPLIANCE WITH THE PROVISIONS OF THE PLAN

The water plant staff will monitor overall raw water usage, potable water production, clearwell levels, and potable water volume pumped into the system from each water treatment plant to determine the overall demand. By comparing the flow records prior to issuance of the declaration while factoring typical changes based on normal peaking factors, the staff can determine the level of compliance in the overall system. Moreover, metering staff will monitor individual customer usage based on Advanced Meter System Infrastructure data. The metering staff will attempt to educate those property owners who are not in compliance with the declaration. Based on the many varying factors and efficacy of response actions during a water shortage emergency, the Director of Public Utilities may direct enforcement or non-enforcement of any specific response action within the WSRP and may add additional response actions to any stage of a water shortage emergency when necessary for the protection of the public health and safety. The Field Services Manager will be responsible for notification and assessment of fees.

Fees may be placed on the customers' bill and non-payment may result in disconnection of service. All notifications and warnings assessed in a Stage 1 water shortage shall count as a first offense when assessing non-compliance fees for subsequent stages. Except for stage 1 offenses, the number of the offense is independent of the stage in which it was received, and they are cumulative when occurring within the same overall water shortage emergency. Offense accumulation does not start over until the overall water shortage emergency is rescinded. For example, a customer receiving a notification during stage 1 would be assessed a "second offense" charge if a subsequent offense occurred during stage 2. A cumulative third offense during stage 4 would be assessed as a "third offense".

6. WATER SHORTAGE EMERGENCY TERMINATION

The Director of Public Utilities will determine when to terminate a water system emergency and public notice of the termination shall be provided by the County's Communications Officer.

7. PLAN AMENDMENT REVIEW AND ADOPTION

The Water Shortage Response and any amendments to the Water Shortage Response Plan will be provided to the County Public Utilities staff for review and comment. After those comments have been addressed, copies of the proposed plan and/or amendments will be provided to the County Manager, Communications Officer, and Finance Director for review.

The Water Shortage Response Plan and any subsequent amendments will be submitted to the Board of Commissioners for review. A copy of the plan will be provided to the NC DENR staff.

The Deputy Director of Water Operations shall be responsible for review of the Water Shortage Response Plan after the declaration of any stage of the plan to determine its effectiveness in meeting the conservation goal. The Water Shortage Response Plan will also be reviewed after any significant improvement or change in the water treatment systems and/or water distribution system such as water treatment plant expansion, change in water source, emergency interconnection agreement, or significant water distribution system expansion. At a minimum, the Water Shortage Response Plan will be reviewed once every five years.

8. VARIANCES

All appeals for a variance must be submitted to the Director of Public Utilities in writing. The Director of Public Utilities will review the request, and the following criteria will be used to determine if a variance can be granted:

- A. Impact on the overall water conservation goals
- B. Potential property damage
- C. Potential alternative sources of water supply
- D. Volume of water to be consumed
- E. Duration of usage
- F. Number of similarly situated property owners

The Director of Public Utilities shall provide a written determination on the request for a variance within six (6) working days of the receipt of the variance. If the request for a variance is denied, the property owner has the right to appeal the determination to the Board of Commissioners. The Board of Commissioners may hear the appeal at the next regularly scheduled meeting provided the appeal request is received at least seven (7) days in advance of the next meeting.

9. EVALUATION

During the declaration of the Water Shortage Event, the County staff will monitor the water usage. A spreadsheet will be developed to track water produced at the plants and customer usage. The pre-declaration usage will be compared to the post-declaration usage to determine an overall percentage reduction in demand. If the desired reduction in demand has not occurred, changes in the plan or enforcement of the plan may be recommended.

After the water shortage event has concluded, a post-event evaluation will be held within 30 days after cancellation of the water use restrictions. Changes in the Water Shortage Response Plan may be recommended to the Board of Commissioners based upon the problems and issues that were discovered during the event.