

**Water Shortage Response Plan
Town of Caswell Beach, North Carolina
August 18, 2010**

The procedures herein are written to reduce potable water demand and supplement existing drinking water supplies whenever existing water supply sources are inadequate to meet current demands for potable water.

I. Authorization

The Caswell Beach Town Administrator shall enact the following water shortage response provisions whenever the trigger conditions outlined in Section IV are met. In his absence, the Public Works Supervisor will assume this role.

Mr. Jim Carter
Caswell Beach Town Administrator
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Mr. Chuck Seenes
Caswell Beach Public Works Supervisor
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II. Notification

The following notification methods will be used to inform water system employees and customers of a water shortage declaration: employee e-mail announcements, notices at municipal buildings, notices in water bills. Required water shortage response measures and declarations of emergency water restrictions or water rationing will be communicated through *The State Port Pilot*, PSA announcements on local radio and cable stations and the town website (<http://www.caswellbeach.org>).

III. Levels of Response

Five levels of water shortage response are outlined in the table below. The five levels of water shortage response are: voluntary reductions, mandatory reductions I and II, emergency reductions and water rationing. A detailed description of each response level and corresponding water reduction measures follow below.

Stage	Response	Description
1	Voluntary Reductions	Water users are encouraged to reduce their water use and improve water use efficiency; however, no penalties apply for noncompliance. Water supply conditions indicate a potential for shortage.
2	Mandatory Reductions I	Water users must abide required water use reduction and efficiency measures; penalties apply for noncompliance. Water supply conditions are significantly lower than the seasonal norm and water shortage conditions are expected to persist.
3	Mandatory Reductions II	Same as in Stage 2
4	Emergency Reductions	Water supply conditions are substantially diminished and pose an imminent threat to human health or environmental integrity.
5	Water Rationing	Water supply conditions are substantially diminished and remaining supplies must be allocated to preserve human health and environmental integrity.

In Stage 1, Voluntary Reductions, all water users will be asked to reduce their normal water use by 5%. Customer education and outreach programs will encourage water conservation and efficiency measures including: irrigating landscapes a maximum of one inch per week; preventing water waste, runoff and watering impervious surfaces; watering plants deeply to encourage root growth; washing only full loads in clothes and dishwashers; using spring-loaded nozzles on garden hoses; and identifying and repairing all water leaks.

In Stage 2, Mandatory Reductions I, all customers are expected to reduce their water use by 10% in comparison to their previous month’s water bill. In addition to continuing to encourage all voluntary reduction actions, the following restrictions apply: irrigation is limited to a half inch per week between 8PM and 8AM; outdoor use of drinking water for washing impervious surfaces is prohibited; and all testing and training purposes requiring drinking water (e.g. fire protection) will be limited.

In Stage 3, Mandatory Reductions II, customers must continue actions from all previous stages and further reduce water use by 20% compared to their previous month’s water bill. All non-essential uses of drinking water are banned and garden and landscape irrigation must be reduced to the minimum amount necessary for survival. Additionally, in Stage 3, a drought surcharge of 1.5 times the normal water rate applies.

In Stage 4, Emergency Reductions, customers must continue all actions from previous stages and further reduce their water use by 25% compared to their previous month’s water bill. A ban on all use of drinking water except to protect public health and safety is implemented and drought surcharges increase to 2 times the normal water rate.

The goal of Stage 5, Water Rationing, is to provide drinking water to protect public health (e.g. residences, residential health care facilities and correctional facilities). In Stage 5, all customers are only permitted to use water at the minimum required for public health protection. Firefighting is the only allowable outdoor water use and pickup locations for distributing potable water will be announced according to Caswell Beach’s Emergency Response Plan. Drought surcharges increase to 5 times the normal water rate.

IV. Triggers

Caswell Beach is provided water solely by purchase from Brunswick County. When Brunswick County declares a water shortage Caswell Beach is required to do so as well. During this time Caswell Beach Public Works Supervisor will stay in close contact with Brunswick County and follow their triggers.

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.

V. Enforcement

The provisions of the water shortage response plan will be enforced by Town of Caswell personnel and local law enforcement. Violators may be reported on the Town’s phone line. Citations are assessed according to the following schedule depending on the number of prior violations and current level of water shortage.

Water Shortage Level	First Violation	Second Violation	Third Violation
Voluntary Reductions	N/A	N/A	N/A
Mandatory Reductions (Stages 2 and 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 3, 4 and 5.

VI. Public Comment

Customers will have multiple opportunities to comment on the provisions of the water shortage response plan. The draft plan will be available at Town Hall and posted on the town website for customers to view. A notice will be published in The State Port Pilot and sent electronically to subscribers on the town website to encourage public participation in this process. The Town Council will consider public comments regarding the draft plan at an advertised open meeting prior to adoption of the final plan. The final plan will be posted on the town website for public information. All subsequent amendments to the final plan will follow the same procedure as the draft plan.

VII. Variance Protocols

All appeals for a variance must be submitted to the Town Administrator in writing. The Administrator 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 Administrator must provide a written determination on the request for a variance within three (3) 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 Town Council. The Town Council would 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

VIII. Effectiveness

The effectiveness of the Caswell Beach 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.

IX. 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 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 Caswell Beach's Town Commissioners. The Town of Caswell Beach Public Works Supervisor is responsible for initiating all subsequent revisions.