

CITY OF HIGH POINT

AGENDA ITEM



Title: Water Shortage Response Plan

From: Terry Houk – Public Services Director
Derrick Boone – Asst. Director Public Services
Wendell Pickett – Ward Plant Superintendent

Meeting Date: January 17, 2017

Public Hearing: No, 30-day Public Comment Period

Advertising Date: N/A

Advertised By: N/A

Attachments: Attachment A – Water Shortage Response Plan
Attachment B – Sample Resolution

PURPOSE:

The Water Shortage Response Plan establishes a written procedures 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.

BACKGROUND:

North Carolina General Statute 143-355 (l) requires that each unit of local government that provides public water services or plans to provide such services shall, either individually or together with other such units of local government, prepare and submit a Water Shortage Response Plan. The proposed Water Shortage Response Plan is in accordance with the provisions of North Carolina General Statute 143-355 (l) and it will provide appropriate guidance for the future management of water supplies for the City of High Point.

Manager's briefing on June 6, 2016. A subsequent 30-day public comment period was held and no comments were received. The Water Shortage Response Plan is now ready for City Council approval.

BUDGET IMPACT:

N/A

RECOMMENDATION / ACTION REQUESTED:

The Public Services Department is recommending that Council adopt the Resolution to approve the Water Shortage Response Plan.

**Water Shortage Response Plan City of
High Point, North Carolina
April, 2016**

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 High Point City Manager shall enact the following water shortage response provisions whenever the trigger conditions outlined in Section IV are met. In his or her absence, the Public Services Director will assume this role.

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High Point City Manager
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High Point Public Services Director
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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 and on the City of High Point website homepage. Required water shortage response measures will be communicated through PSA announcements on local radio and cable stations, social media and on the City of High Point website. Declaration of emergency water restrictions or water rationing will be communicated to all customers by telephone through use of reverse 911.

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.

High Point Water Shortage Response Plan

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 with 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 washers 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 High Point's Emergency Response Plan. Drought surcharges increase to 5 times the normal water rate.

IV. Stages

The City of High Point's water sources are two reservoirs and the Piedmont Triad Regional Water Authority (PTRWA). The following measurements of usable storage and intake levels trigger entry into corresponding water restriction stages*. The usable storage is the total of both of the City's reservoirs and is based upon documentation maintained by the Public Services Department.

Stage	Usable Storage
1	80%
2	70%
3	60%
4	50%
5	40%

Also if the PTRWA declares a water shortage, High Point shall declare one as well. During this time the High Point Public Services Director will stay in close contact with PTRWA 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 City of High Point Services Department and police personnel. Violators may be reported to the City's dedicated water conservation hotline or the e-mail contact listed on the City's website. 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. First, a draft plan will be available at City Hall for customers to view. A notice will be included in customer water bill notifying them of such. Also a draft plan will be published on the City of High Point website. All subsequent revisions to the draft plan will be published at least 30 days prior to an adoption vote by High Point's City Council.

VII. Variance Protocols

Applications for water use variance requests are available from the City of High Point website and City Utility Office. All applications must be submitted to the Public Services Department for review by the Public Services Director or his or her 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.

VIII. Effectiveness

The effectiveness of the High Point 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 High Point's City Council. The City of High Point Public Services Director is responsible for initiating all subsequent revisions.

SAMPLE RESOLUTION FOR APPROVING WATER SHORTAGE RESPONSE PLAN

WHEREAS, North Carolina General Statute 143-355 (l) requires that each unit of local government that provides public water services or plans to provide such services shall, either individually or together with other such units of local government, prepare and submit a Water Shortage Response Plan; and

WHEREAS, as required by the statute and in the interests of sound local planning, a Water Shortage Response Plan for (name of the unit), has been developed and submitted to the (governing body) for approval; and

WHEREAS, the (governing body) finds that the Water Shortage Response Plan is in accordance with the provisions of North Carolina General Statute 143-355 (l) and that it will provide appropriate guidance for the future management of water supplies for (name of the unit), as well as useful information to the Department of Environment and Natural Resources for the development of a state water supply plan as required by statute;

NOW, THEREFORE, BE IT RESOLVED by the (governing body) of (name of the unit) that the Water Shortage Response Plan entitled, _____ dated _____, is hereby approved and shall be submitted to the Department of Environment and Natural Resources, Division of Water Resources; and

BE IT FURTHER RESOLVED that the (governing body) intends that this plan shall be revised to reflect changes in relevant data and projections at least once every five years or as otherwise requested by the Department, in accordance with the statute and sound planning practice.

This the _____ day of _____, 20_____.

Name: _____

Title: _____ (Mayor or Board Chairman)

Signature: _____

ATTEST: