# TOWN OF ABERDEEN WATER SHORTAGE RESPONSE PLAN UPDATE

## 1. Authority:

Authority must enact plan directly whenever trigger conditions are met.

The Town Manager will enact the plan directly whenever a water shortage response takes place after communication to the mayor and city council. The Town Manager will then give notice to the public through the media and such other means as are reasonably calculated to make the public aware of the condition. In the event the Town Manager is not available, the Public Works Director will assume this role. Below is a list to encourage the customers to observe water conservation measures to reduce the wasting of water:

- a. Check plumbing, faucets and toilets for leaks, and if necessary repair.
- b. Store drinking water in the refrigerator to avoid trying to run it cool at the tap.
- c. Use shower for bathing purposes or reduce the depth of water used for tub baths. Limit showers to five (5) minutes where possible.
- d. Refrain from running faucets while shaving, rinsing dishes or brushing teeth.
- e. Install water flow restrictive devices in showerheads.
- f. Install water-saving devices such as plastic bottles or commercial units in toilet tanks.
- g. Review water uses and where feasible install recycle systems, particularly commercial and industrial customers.
- h. Limit the use of clothes washers and dishwashers and when used, operate fully loaded.
- i. Reduce the flushing of toilets to the minimum whenever practical.
- j. Limit lawn watering to only when grass shows signs of withering and apply water as slow as possible to achieve deep penetration.
- k. Limit shrubbery watering to the minimum, reusing household water when possible.
- 1. Limit car washing to the minimum.
- m. Limit wash downs of outside areas such as sidewalks, patios, driveways, or other similar purposes.
- n. Limit hours of operation of water-cooled air conditioners where possible.
- o. Use biodegradable disposable dishes and utensils, both for residential and commercial purposes, where feasible.

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### 2. Notification

States method(s) by which water users and system employees must be notified whenever plan is enacted: The Town of Aberdeen water users would be notified through our Towns website, the local newspaper, TV station, 3 Radio Stations and Nixle. The Town of Aberdeen employees would be notified by telephone.

States methods by which water users must be notified of required response measures: Upon receiving such report, and upon determining that water conservation measures are necessary to adequately address the water shortage, the manager may declare any stage of water conservation described herein to be in force. Following such initial report to the governing board, the manager may impose such stages or stages of water conservation as may deemed necessary to protect the Town's water supplies. The manager or the governing board may terminate any stage of water conservation upon determining that it is no longer necessary.

## 3. 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 half inch per week between 8 p.m. and 8 a.m.; outdoor use of drinking water for washing impervious surfaces if 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 used 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 portable water will be announced according to Aberdeen's Emergency Response Plan. Drought surcharges increase to 5 times the normal water rate.

# 4. Triggers

The Town of Aberdeen's water source is groundwater, the following measurements of well pumping times and well levels in relationship to pump intake levels trigger entry into corresponding water restriction stages.

The Town Manager will enact the plan directly whenever a water shortage response takes place after communication to the mayor and city council. The Town Manager will then give notice to the public through the media and such other means as are reasonably calculated to make the public aware of the condition. In the event the Town Manager is not available, the Public Works Director will give notice to the public as required.

Stage	Well Operating Conditions			
1	Pumping Time > 10 hrs			
	20% reduction in seasonal normal distance from static water level and pump			
	intake			
	20% increase pumping time for same output			
2	Pumping Time >12 hrs			
	40% reduction in distance from static water level and pump intake			
	40% increase pumping time for same output			
3	Pumping Time >14 hrs			
	60% reduction in distance from static water level and pump intake			
	60% increase pumping time for same output			
4	Pumping Time >20 hrs			
	80% reduction in distance from static water level and pump intake			
5	Water level at pump intake elevation			

#### 5. Enforcement

The provisions of the water shortage response plan will be enforced by the Town of Aberdeen Utility Department and police personnel. Violators may be reported to the Town's dedicated water conservation hotline or the e-mail contact listed on the Town's website (<a href="www.townofaberdeen.net">www.townofaberdeen.net</a>). 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	<b>Second Violation</b>	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.

## 6. 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 Pilot Newspaper and on the Town of Aberdeen website. A public hearing will be scheduled with notice printed in all customer water bills to collect comments on the draft. All revisions to the draft plan will be published at least 30 days prior to an adoption vote by the Aberdeen Town Council.

#### 7. Variance Protocols

Applications for water use variance requests are available from the Town of Aberdeen website and Public Works Office. All applications must be submitted to the Public Works Director.

A decision to approve or deny individual variance request 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 and the prevention of structural damage.

#### 8. Effectiveness

The effectiveness of the Town of Aberdeen 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.

#### 9. 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 of recommend any necessary improvements to the plan to Aberdeen Town Council.

The Town of Aberdeen Public Works Director is responsible for initiating all subsequent revisions.