

# **City of Jacksonville**

## **Water Shortage Response Plan**

**Adopted June 19, 2012**

(Updated September 17, 2019)

Draft update for consideration Published August 8, 2019

In order 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, this Water Shortage Response Plan is hereby established for the City of Jacksonville and all customers of the City water system, regardless of customer location.

### **I. Authorization of Declaration**

The Mayor and Council of the City of Jacksonville hereby authorize the City Manager to declare that a water shortage exists and to enact the following water shortage response provisions whenever the trigger conditions outlined in Section IV are met. In the absence of the City Manager, the Public Services Director will assume this role.

City Manager

City of Jacksonville

Phone: (910) 938-5221

E-mail: [citymanager@jacksonvillenc.gov](mailto:citymanager@jacksonvillenc.gov)

Public Services Director

City of Jacksonville

Phone: (910) 938-5233

E-mail: [contactus@jacksonvillenc.gov](mailto:contactus@jacksonvillenc.gov)

### **II. Notification of water shortage**

Notification that a water shortage exists, and that the City is activating the Water Shortage Response Plan shall be by the following methods:

- A. Depending on the severity, a media conference where government officials would share information would be held.
- B. These methods would be used in addition, or instead of the news conference:
  1. Announcements on the Jacksonville-Onslow Government Television Channel and streaming service,
  2. Media Releases to local media including TV, radio, newspaper, websites and social bloggers and,
  3. Posts to the City's multiple social media accounts,
  4. If timely, Water and Sewer Customer billing inserts,
  5. If urgent, using the City's Citizen phone, email, & text system (Current name: Jacksonville Connect)
  6. Employee e-mail announcements,
  7. Notices at municipal buildings, and
  8. On the City of Jacksonville website homepage ([www.jacksonvillenc.gov](http://www.jacksonvillenc.gov)).

### III. Levels of Response

Five levels of water shortage response are established and outlined in the table below. The five levels of water shortage response are: Voluntary Reductions, Mandatory Reductions I, Mandatory Reductions II, Emergency Reductions and Water Rationing. The response level and the required actions for each level are:

Level	Response	Description
<b>1</b>	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. Target reduction of 5%.
<b>2</b>	Mandatory Reductions I	Water users must abide by required water use reduction and efficiency measures; penalties apply for noncompliance. Water supply conditions are significantly lower than the norm and water shortage conditions are expected to persist. Target reduction is 10%.
<b>3</b>	Mandatory Reductions II	Same as in Level 2. Target reduction is 20%.
<b>4</b>	Emergency Reductions	Water supply conditions are substantially diminished and pose an imminent threat to human health or environmental integrity. Target reduction is 25%.
<b>5</b>	Water Rationing	Water supply conditions are substantially diminished and remaining supplies must be allocated to preserve human health and environmental integrity.

**Level 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:

1. To checking plumbing and toilets for leaks, and, if necessary repair
2. To repair leaking faucets whenever they develop
3. To store drinking water in the refrigerator to avoid trying to run it cool at the tap
4. To use shower for bathing purposes or reduce the depth of water used for tub baths.
5. To limit showers to four (4) minutes where possible
6. To refrain from running faucets while shaving, rinsing dishes or brushing teeth
7. To install water conservation devices in faucets, showerheads and toilets
8. To limit the use of clothes washers and dishwashers, and when used, to operate fully loaded
9. To reduce the flushing of toilets to the minimum whenever practical
10. To limit lawn watering to only when grass shows signs of withering and apply water as slow as possible to achieve deep penetration
11. To limit shrubbery watering to the minimum, reusing household water when possible

12. To limit car washing to the minimum
13. To limit wash downs of outside areas such as sidewalks, patios, driveways, or other similar purposes
14. To use biodegradable disposable dishes and utensils, both for residential and commercial purposes, where feasible
15. To review water uses and where feasible to install recycle systems, particularly for commercial and industrial customers
16. To avoid peak times of use by setting automatic sprinklers system to come on either 3:30 am to 5:30 am, or from 8:00 am to 10:00 am. And then to only water items 2 to 3 times per week.

**Level 2. Mandatory Reductions I:** All customers, except those using the base rate only, are required 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: It shall be unlawful:

1. To water lawns, grass, shrubbery, trees, flower and vegetable gardens except as follows:
  - a. Customers located to the north of the center line of U.S. Highway 17 may water lawns, grass, shrubbery, trees, flower and vegetable gardens on Saturday morning between the hours of 6:00 a.m. and 9:00 a.m.
  - b. Customers located to the south of the center line of U.S. Highway 17 may water lawns, grass, shrubbery, trees, flower and vegetable gardens on Sunday morning between the hours of 6:00 a.m. and 9:00 a.m.
  - c. Persons regularly engaged in the sale of plants shall be permitted to use water for such purposes on Monday, Wednesday and Friday. All such watering is to be done by a hand-held hose or container or drip irrigation system.
2. To fill newly constructed swimming or wading pools or refill swimming or wading pools which have been drained. A minimal amount of water may be added to maintain continued operation of pools which are in operation at the time the Stage I shortage is placed into effect.
3. To wash automobiles, trucks, trailers, boats, airplanes, or any other types of mobile equipment, including commercial washing. A person regularly engaged in the business of washing motor vehicles and any commercial car wash facility shall be permitted to use water for such purposes, when at least 50% water savings are documented.
4. To wash down outside areas such as streets, driveways, service station aprons, parking lots, office buildings, exteriors of existing or newly constructed homes or apartments, sidewalks, or patios, or to use water for other similar purposes.
5. To operate or introduce municipal system water into any ornamental fountain, pool, pond or other structure making similar use of water.
6. To use water from public or private fire hydrants for any purpose other than fire suppression or other public emergency.

7. To use municipal system water for dust control or compaction.
8. To use water for any unnecessary purpose or to intentionally waste water.

The owner or occupant of any land or building which receives water from the City and that also uses water from a well or supply other than that of the City shall post and maintain in a prominent place thereon a sign obtained from the City giving public notice of the use of the well or other source of supply.

**Level 3. Mandatory Reductions II:** All customers, except those using the base rate only, must continue actions from all previous levels and further reduce water use to accomplish a 20% reduction compared to their previous water bills prior to Level 2 reductions. 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 Level 3, a drought surcharge of 1.5 times the normal water volume charge applies.

**Level 4. Emergency Reductions:** All customers, except those using the base rate only, must continue all actions from previous levels and further reduce their water use by 25% compared to their previous water bill under level 2.

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 volume charge shall apply.

It shall be unlawful:

1. To use water outside a structure for any use other than an emergency involving fire.
2. To introduce water into any swimming pool.
3. To serve drinking water in restaurants, cafeterias, or other food establishment, except upon request.
4. To make any nonessential use of water for commercial or public use, and the use of single-service plates is encouraged and recommended in restaurants.
5. To operate an evaporative air conditioning unit which recycles water, except during the operating hours of the business

**Level 5. Water Rationing:** All customers will be limited in their use of water to those activities required for personal health and safety. Firefighting is the only allowable outdoor water use. Drought surcharges increase to 5 times the normal water volume charge.

#### IV. Triggers

The City of Jacksonville’s water sources are wells and groundwater. The following measurements will trigger entry into corresponding water restriction levels.

Level	Well Operating Conditions
<b>1</b>	Pumping Time >80% of the Safe Yield of Water System or Water Usage>10% over water usage annual average for the past calendar year for a period of five (5) consecutive days
<b>2</b>	Pumping Time >85% of the Safe Yield of Water System or Water Usage>15% over water usage annual average for the past calendar year for a period of five (5) consecutive days
<b>3</b>	Pumping Time >90%of the Safe Yield of Water System or Water Usage>20% over water usage annual average for the past calendar year for a period of five (5) consecutive days
<b>4</b>	Pumping Time >95%of the Safe Yield of Water System or Water Usage>25% over water usage annual average for the past calendar year for a period of five (5) consecutive days
<b>5</b>	Pumping Time >100% of the Safe Yield of Water System or Water Usage>30% over water usage annual average for the past calendar year for a period of five (5) consecutive days

#### Ad Hoc Call

Also a Water Shortage may be called by the Public Services Director when the Director feels unforeseen circumstances dictate it.

#### Return to Normal

When conditions have abated that resulted in the need to declare a water shortage and the situation is returning to normal, water conservation measures employed during each level 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 Jacksonville Public Services Department and Police personnel. Violators may also be reported on the City’s Phone line. Citations are assessed according to the following schedule depending on the number of prior violations and current level of water shortage.

<b>Water Shortage Level</b>	<b>First Violation</b>	<b>Second Violation</b>	<b>Third Violation</b>
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 the following opportunities to comment on the provisions of the Water Shortage Response Plan: First, a draft of the plan will be available at City Hall for customers to view; Second, a notice will be included in each customer water bill notifying them of the availability to review the plan; Third, a draft plan will be published on the City of Jacksonville website. Notice will be printed that public comments on the draft may be provided to the City for a 30-day period prior to the adoption of the plan. All subsequent revisions to the draft plan will be published at least 30 days prior to an adoption vote by Jacksonville’s City Council.

## VII. Variance Protocols

Applications for water use variance requests from any level requirements are available from the City of Jacksonville website and Public Services Administrative Office. All applications must be submitted to the Public Services Administrative Office for review by the Public Services Director or 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:

1. Impact on water demand for the total City system and its customers;
2. Expected duration of the use request;
3. Alternative water source options to address the volume of the proposed need;
4. Social and economic importance of the proposed need;
5. Purpose of the proposed need (i.e. necessary use of drinking water); and
6. The prevention of structural damage.

### **VIII. Effectiveness**

The effectiveness of the Jacksonville 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**

This 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 every five years in conjunction with the updating of the City of Jacksonville Local Water Supply Plan. Further, a water shortage response planning work group will review procedures following each emergency or rationing level to recommend any necessary improvements to the plan to the City Council. The City of Jacksonville Public Services Director is responsible for initiating all subsequent revisions.