City of Asheboro, NC

Water Shortage Response Plan

The procedures herein are written to reduce potable water demand and protect existing drinking water supplies whenever they are in danger of being inadequate to meet customer needs. This plan is adopted to give the City of Asheboro guidelines to deal with water emergency issues related to drought. Elements of this plan may also be used to deal with reservoir contamination or if there is equipment or facility failure.

Conditions justifying declaration of water emergency.

(a) **Insufficient reserve supply.** A water emergency may be declared to exist when the combined reserve supplies available from Lake Reese and Lake Lucas shall have reached the point where the reserve supply has been so reduced that the citizens cannot be supplied with water to protect their health and safety without curtailing substantially the water demand.

(b) **Reservoir contamination.** A water emergency may be declared to exist when the reserve supplies available at Lake Reese and Lake Lucas have been contaminated in such a manner as to permit contamination to pass through the water treatment plant, damage equipment or endanger employees, or cannot be treated to the standards established by the Safe Drinking Water Act or the standards established by the state, or endangers the health and safety of the citizens.

(c) **Equipment or facility failure.** A water emergency may be declared in the event of failure of raw water transmission lines, chlorination systems, flocculation systems, settling systems, filtration systems, chemical feed systems, storage systems, including finished water reservoirs and elevated tanks, high-service pumps or elements of the distribution system. Equipment or facility failure shall include any occurrence, which reduces the ability to produce and distribute water at the designed capacity of the water plant or to the minimum level necessary to protect the health and safety of the citizens.

I. Authorization

Subject to review by the City Council at any regular or special meeting of the City Council, a water emergency may be declared by the City Manager or his or her designee to exist when any condition or situation exists that may threaten the availability and/or safety of either treated or potable water from the water supply, treatment, and distribution system operated and maintained by the city. A water emergency shall be declared by the City Manager or his or her designee to exist when users of the city water system cannot be supplied with treated or potable water without substantially curtailing the water demand placed on the city's water system. Furthermore, a water emergency shall be declared to exist when production, treatment, transmission, and storage facilities are incapable of meeting all daily water demands or when projections of available water show that the available supply of water will not meet the daily water demands.

II. Notification

A declaration of the existence of a water emergency by the City Manager or his or her designee shall specify the level of severity of the emergency and be in the form of a signed executive order that, upon its issuance, shall be distributed to the Mayor and members of the City Council in a manner designed to provide the most expeditious notification possible.
Once the distribution of the declaration of the existence of a water emergency to the Mayor and members of the City Council has been undertaken, the City Manager or his or her designee shall give notice to the general public by means of a public press announcement of the existence of a water emergency and the severity thereof. The regulatory provisions authorized by this plan will become effective 24 hours after the issuance of the public press announcement specified in the preceding sentence.

III. Levels of Response

Four levels of water emergency response are outlined in the table below. The four levels of water emergency response are: voluntary restrictions and mandatory restrictions I, II, and III. A detailed description of each response level and corresponding water reduction measures follow below.

<table>
<thead>
<tr>
<th>Level</th>
<th>Response</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Voluntary Restrictions</td>
<td>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 emergency.</td>
</tr>
<tr>
<td>2</td>
<td>Mandatory Restrictions I</td>
<td>Water users must abide by required water use reduction and efficiency measures; penalties apply for noncompliance. Water supply conditions are significantly lower than the seasonal norm and water emergency conditions are expected to persist. Allows maintaining jobs and landscaping investments related to water use.</td>
</tr>
<tr>
<td>3</td>
<td>Mandatory Restrictions II</td>
<td>Bans additional water usages not included in Level 2 Mandatory Restrictions I</td>
</tr>
<tr>
<td>4</td>
<td>Mandatory Restrictions III</td>
<td>Water supply conditions are substantially diminished and pose an imminent threat to human health or environmental integrity.</td>
</tr>
</tbody>
</table>

(1) *Level I (Voluntary).* During a declared Level I water emergency, consumers of water from the city water system shall be encouraged to implement the following voluntary water conservation practices:

(a) Watering of lawns, ornamental plants, and gardens should be limited to the hours between 7:00 p.m. and 7:00 a.m.;

(b) Use of water for wash down of outside areas such as driveways, parking lots, and sidewalks should be curtailed;

(c) Faucets should not be left running while shaving, brushing teeth, or washing dishes;

(d) The use of clothes and dishwashers should be limited where possible, and these units should be operated with full loads;

(e) Washing cars and other vehicles should be curtailed to Saturday and Sundays, and hoses should not be left running while washing;

(f) The use of flow restriction and other water saving devices is encouraged;

(g) Showers should be used for bathing, and showers should be limited to four minutes
or less; and
(h) Filling of pools should be deferred or limited to hours between 7:00 p.m. and 7:00 a.m.

(2) Level II (Mandatory). During a declared Level II water emergency, the following mandatory water use restrictions shall be in effect for consumers of water from the city water system:

(a) The watering of lawns, ornamental plants, and gardens shall be limited to the hours between 7:00 p.m. and 7:00 a.m.;

(b) The watering of lawns, ornamental plants, and gardens shall not be done except by handheld containers (buckets, jugs, etc.), and no applications for irrigation meters will be accepted or approved;

(c) With the exception of situations where a wash down of outside areas is necessary due to public health and safety concerns, the residential use of water for wash down of outside areas is prohibited. Commercial pressure washers shall be permitted to continue normal operations. However, the commercial pressure washer owners and/or operators shall ensure that water wastage does not occur;

(d) Residential washing of cars and other vehicles is prohibited. Automobile retail establishments and commercial automobile washing facilities including those providing hand held washing nozzles shall be permitted to continue normal operations. However, the facility owner/operator shall ensure that water wastage does not occur;

(e) Restaurants and other food serving establishments shall serve water to patrons only at the request of the patron(s);

(f) Commercial, industrial and construction operations shall eliminate all possible waste of water. Large scale commercial and industrial operations and construction activities that utilize 20,000 cubic feet or more of water per month shall submit a water reduction compliance plan to achieve 25%, 50%, or 75% water reduction as specified under the Level II water emergency declaration within 14 days of the effective date of the regulations and restrictions specified in the Level II water emergency declaration; and

(g) Above-ground pools, Jacuzzis, and hot tubs having a capacity of 500 gallons or more and all newly constructed or drained in-ground pools shall be filled by permit only. The Water Resources Director or his or her designee shall review applications for such fill permits. The issuance of such a permit may be denied on the basis of the assessment by the Water Resources Director of the severity of the situation.

(3) Level III (Mandatory). During a declared Level III water emergency, the following mandatory use restrictions shall be in effect for consumers of water from the city water system:

(a) Any form of watering or irrigating lawns, gardens, and/or other plants is prohibited;

(b) With the exception of situations where the wash down of certain outside areas is necessary due to public health and safety concerns, the use of water for wash down
of outside areas is prohibited;

(c) With the exception of situations where the washing of certain items is necessary due to public health and safety concerns, the washing of cars, vehicles, and/or other equipment is prohibited;

(d) Restaurants and other food serving establishments shall utilize single serving utensils and plates in addition to serving water to patrons only at the request of the patron(s);

(e) Recreational use of potable water, including filling of pools, is prohibited;

(f) Large scale commercial and industrial water customers and construction activities utilizing 20,000 cubic feet or more of water per month shall achieve mandatory restrictions in daily water usage of 25%, 50%, or 75% through whatever means are available. The target reduction percentage shall be determined by the severity of the water emergency and shall be publicly announced as part of the emergency declaration. The Water Resources Director shall determine compliance with the daily usage reduction targets. Variances to this restriction may be granted by the Water Resources Director to public health facilities including, but not limited to, hospitals and nursing homes;

(g) Drinking water taps or hydrant permits shall be issued or revoked at the discretion of the Water Resources Director; and

(h) Unless a bulk water sale is made pursuant to an existing contract, bulk water sales shall be prohibited.

(4) Level IV (Mandatory). During a declared Level IV water emergency, the following mandatory water use restrictions shall be in effect for consumers of water from the city water system:

(a) All use of water for purposes other than the maintenance of public health and safety is prohibited;

(b) Unless a bulk water sale is made pursuant to an existing contract, bulk water sales shall be prohibited;

(c) Where the city water system is functional, monthly residential water use shall not exceed 1,200 cubic feet of water at each metered location;

(d) Where the city water system is not functional, National Guard and emergency services vehicles shall be utilized to distribute water for household use at prearranged locations within the affected area. Usage by individuals shall be limited to those amounts necessary to sustain life through drinking, food preparation, and personal hygiene; and

(e) The compliance plan for industries during Level IV remains the same as Level III or as directed by the State Public Health Officials.

In the event of the declaration of a "water emergency" it shall be unlawful for any person to use or permit the use of water from the water system of the city in violation of any of the provisions set forth in this plan until such time as the City Manager or his or her designee has declared the restrictive provision(s) in question to be no longer in effect.
IV. Triggers

Triggers for the City of Asheboro levels of response are provided in Table 1 below. The City’s main sources of water are Lake Lucas and Lake Reese. The following measurements of usable storage and days of available supply trigger entry into corresponding water restriction stages based on data recorded in Table 2 incorporated as Appendix A.

<table>
<thead>
<tr>
<th>Restriction Level</th>
<th>Usable Storage</th>
<th>Days of Available Supply</th>
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<tbody>
<tr>
<td>1</td>
<td>&lt;60%</td>
<td>&lt;190 Days</td>
</tr>
<tr>
<td>2</td>
<td>&lt;50%</td>
<td>&lt;150 Days</td>
</tr>
<tr>
<td>3</td>
<td>&lt;40%</td>
<td>&lt;125 Days</td>
</tr>
<tr>
<td>4</td>
<td>&lt;35%</td>
<td>&lt;100 Days</td>
</tr>
</tbody>
</table>

Table 1

Once a water emergency has been declared and the appropriate staged restrictions imposed, the Water Resources Director or his or her designee shall review the operational status of the city's water system and the supply of water available to the city's water system and keep the City Manager or his or her designee apprised of the operational status of the city's water system and the available water supply. On the basis of the information gathered, the Water Resources Director or his or her designee shall recommend to the City Manager or his or her designee when a different stage of restriction should be implemented. The City Manager or his or her designee shall make the final determination to change the restriction stage. If such a change in the stage of restriction is warranted, the notification procedures prescribed by Division II above shall be followed in the same manner as for the initial declaration of a water emergency.

V. Enforcement

The provisions of the water shortage response plan will be enforced by the City of Asheboro. Violators may be reported to the Water Resources Division at (336)-626-1201 Ext. 258 or the Water Treatment Plant at (336) 626-1215.

Compliance with this plan shall be enforced by personnel of the Water Resources Division, the Police Department, and any other personnel designated by the City Manager. Failure to comply with any of the regulations or restrictions of this plan shall be unlawful and a violation of this plan. All remedies authorized by law for noncompliance with this plan, including the issuance of a civil penalty citation or an action for injunctive relief, may be exercised to enforce the provisions of this plan. It shall be unlawful to fail to act in accordance with the provisions of this plan or to use water in any manner that constitutes an attempted and/or actual evasion or avoidance of the water restrictions prescribed by this plan.

Any consumer of water from the city water system who violates any provision of this plan shall be subject to civil penalties as defined in the Asheboro Code or Ordinances Chapter § 50.027 EMERGENCY WATER MANAGEMENT PROCEDURES.

VI. Variance Protocols

Water use variance requests may be made to the office of the City Manager at 146 N. Church Street (336) 626-1201. The City Manager or his designee may authorize relief from specific provisions of these restrictions in order to maintain an economic or public investment or to
continue employment by business or industrial customers

VII. 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, as required by the provisions of G.S. 143-355 (l). Further, the Water Resources Director will review procedures following each emergency to recommend any necessary revisions to the plan to the City Council.

Approved by the Asheboro City Council on _____________________________, 2018