Water Shortage Response Plan
City of Laurinburg, North Carolina
February 26, 2018

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 City of Laurinburg 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 Treatment Plants Director will assume this role.

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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 Laurinburg website homepage. Required water shortage response measures will be communicated through The Laurinburg Exchange, local radio and on The City of Laurinburg’s website.

III. Levels of Response

Five levels of water shortage response are outlined below. The five levels of water shortage response are:

**Stage I**  Water Restriction Alert- Voluntary Water Restriction
**Stage II**  Water Shortage- Level A Level B Warning
**Stage III**  Water Shortage- Danger Mandatory Water Restriction
**Stage IV**  Water Shortage- Emergency Mandatory Water Restriction
**Stage V**  Water Shortage- Crisis Mandatory Water Restriction

*A detailed description of each response level and corresponding water reduction measures follows.*
<table>
<thead>
<tr>
<th>Stage</th>
<th>Response</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Voluntary Reductions</td>
<td>Water users are encourage to reduce their water use and improve water use efficiency; however, no penalties apply for noncompliance. Water supply conditions indicate a potential for shortage.</td>
</tr>
<tr>
<td>2</td>
<td>Mandatory Reductions I</td>
<td>Water users must abide required water use reduction and efficiency measures; penalties apply for non-compliance. Water supply conditions are significantly lower than the seasonal norm and water shortage conditions are expected to persist.</td>
</tr>
<tr>
<td>3</td>
<td>Mandatory Reductions II</td>
<td>Same as in Stage 2</td>
</tr>
<tr>
<td>4</td>
<td>Emergency Reductions</td>
<td>Water supply conditions are substantially diminished and pose an imminent threat to human health or environmental Integrity.</td>
</tr>
<tr>
<td>5</td>
<td>Water Rationing</td>
<td>Water supply conditions are substantially diminished and remaining supplies must be allocated to preserve human health and environmental integrity.</td>
</tr>
</tbody>
</table>

**Stage I  Water Restriction Alert- Voluntary Water Restriction**

Daily water demand is approaching 90% of the City’s water treatment capacity or operational time and that there is not more than 150 days of water supply available to the City’s water system. All water users will be asked to reduce their normal water use by 5%. Irrigating landscapes a maximum of one inch per week; preventing water waste, runoff and watering impervious surfaces; water 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.

**Stage II  Water Shortage- Level A & Level B Warning**

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: 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.
Stage III  *Water Shortage- Danger Mandatory Water Restriction*

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.

Stage IV  *Water Shortage- Emergency Mandatory Water Restriction*

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.

Stage V  *Water Shortage- Crisis Mandatory Water Restriction*

All customers are only permitted to use water at the minimum required for public health protection. Firefighting is the only allowable outdoor water use.

IV. Triggers

Well Operating Conditions

Stage I  *Water Restriction Alert- Voluntary Water Restriction*

Pumping Time >10 Hours
20% reduction in seasonal normal distance from static water level and pump intake.
20% increase pumping time for same output.

Stage II  *Water Shortage- Level A Level B Warning*

Pumping Time >12 Hours
40% reduction in distance from static water level and pump intake.
40% increase pumping time for same output.

Stage III  *Water Shortage- Danger Mandatory Water Restriction*

Pumping Time > 14 Hours
60% reduction in distance from static water level and pump intake.
60% increase pumping time for same output.

Stage IV  *Water Shortage- Emergency Mandatory Water Restriction*

Pumping Time > 20 Hours
80% reduction in distance from static water level and pump intake.

Stage V  *Water Shortage- Crisis Mandatory Water Restriction*

Static water levels at well pumps.
V. Enforcement

The provisions of the water shortage response plan will be enforced by the City of Laurinburg's Utility 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.

Violations

Civil penalties for a violation of **Stage II Water Shortage- Level A Level B and Stage III Mandatory Restrictions shall be as follows:**

- **Residential Users**
  - First violation is a warning
  - Second violation is $100.00
  - Third & successive violation is $200.00
  - Discontinuation of Service

Civil penalties for a violation of Stages IV or V, there shall be no warnings given for violations by residential users of the mandatory restrictions of these stages, and the penalties shall be:

- **Residential Users**
  - First violation is $100.00
  - Second violation is $200.00
  - Discontinuation of Service

VI. Public Comment

Customers will have opportunities to comment on the provisions of the water shortage response plan. First a draft plan will be published in The Laurinburg Exchange and on the City's website. A public hearing will be scheduled with notice printed in all customer water bills to collect comments on the draft. All subsequent revisions to the draft plan will be published at least 30 days prior to an adoption vote by Laurinburg's City Council.

VII. Variance Protocols

Applications for water use variance requests are available from the City of Laurinburg's website and Consumer Billing Department. 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 Laurinburg water shortage response plan will be determined by comparing the stated water conservation goals with observed water use reduction date. 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 Laurinburg’s City Council. The City of Laurinburg Treatment Plants Director is responsible for initiating all subsequent revisions.