

ORDINANCE 25-11

**AN ORDINANCE TO ESTABLISH A WATER DROUGHT MANAGEMENT PLAN
FOR THE CITY OF SPRING HILL, TENNESSEE**

WHEREAS, the City of Spring Hill desires to establish a Water Drought Management Plan (“Plan”) as required by the Tennessee Department of Environment and Conservation, in accordance with its regulations and specifications; and

WHEREAS, the Plan establishes the authority responsible for activating the Plan, sets forth goals, priorities and guidelines during Plan activation, identifies coordination with mutual aid partners and other agencies if needed, and outlines a phased drought management strategy with defined implementation triggers; and

WHEREAS, the Plan further identifies measures to ensure sufficient water capacity for life safety purposes, thereby promoting the health, safety and well-being of the citizens of Spring Hill; and

WHEREAS, the Plan provides for regular review every three (3) years, or six (6) month following the activation of any drought phase.

NOW, THEREFORE BE IT ORDAINED, by the City of Spring Hill Board of Mayor and Aldermen, that a Water Drought Management Plan be established in accordance with the requirements of the Tennessee Department of Environment and Conservation in accordance with their regulations and specifications for the City of Spring Hill, Tennessee, as detailed in Exhibit A attached hereto.



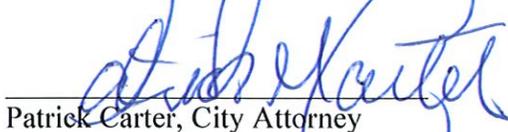
Matt Fitterer, Mayor

ATTEST:



April Goad, City Recorder

LEGAL FORM APPROVED:



Patrick Carter, City Attorney

Passed on First Reading: June 2, 2025

Passed on Second Reading: June 16, 2025



REQUEST: *Approval to establish a Drought Management Plan for the City*
SUBMITTED TO: Board of Mayor and Aldermen
SUBMITTED BY: Jeremy Vanderford, Water Treatment Plant Superintendent
DATE: May 19, 2025

BACKGROUND:

The Tennessee Department of Environment and Conservation is requiring each City to establish a Drought Management Plan to be implemented in the event of water shortages. This is addressed in the City's current Emergency Operations Plan but TDEC is requiring it to be a stand-alone Plan. Staff has prepared the Plan in accordance with TDEC specifications.

FINANCIAL IMPACT:

No financial impact

STAFF RECOMMENDATION:

Staff recommends approval of Ordinance 25-11, to establish a Drought Management Plan for the City of Spring Hill, Tennessee.

Drought Management Plan
For
City of Spring Hill, TN

PWSID: 0000667

April 28, 2025

Spring Hill, TN — Drought Management Plan

1. Authority and Status to Plan

Spring Hill, Tennessee is a municipal corporation chartered and organized under the laws of the State of Tennessee. The Spring Hill Water System owns and operates a water treatment plant and distribution system serving the citizens of Spring Hill and parts of the surrounding Maury and Williamson Counties. The Mayor of Spring Hill or the Board of Mayor and Aldermen has the authority to implement a drought management plan, and the Water Treatment Plant Superintendent has been assigned the responsibility to complete and manage the plan.

2. System Characteristics and Risks

The Spring Hill Water System has approximately 24,752 water connections. Using the household factor of 2.66 persons per household, this serves approximately 65,840 persons.

Water Use Category	Avg Use (Gallons)	% of Total	Peak Use (Gallons)	% of Total	Increase	% Increase
Residential	111,000,000	82%	159,000,000	80%	48,000,000	43%
Commercial	18,000,000	14%	26,000,000	13%	8,000,000	44%
Non-metered/Public	6,000,000	4%	14,000,000	7%	8,000,000	33%
Total	135,000,000	100%	199,000,000	100%	64,000,000	47%

The Spring Hill Water Treatment Plant has a design capacity of 6.0 million gallons per day (MGD). Average system usage is approximately 5.1 MGD, with historical peak daily usage of 6.9 MGD.

Spring Hill draws raw water from the Duck River via its own intake points and has the ability to purchase finished water at a peak of 2.88 MGD as needed from Columbia Power and Water System. The distribution system contains 8 water storage tanks with a combined capacity of approximately 12 million gallons.

3. Purpose of the Drought Management Plan

The purpose of this plan is to reduce water demand in the event of a drought where existing water supplies are inadequate to meet current demand for potable water. The significance of taking into account water use on average and during peak water demand (though it may not reflect an extreme or exceptional drought) is that system officials can identify water uses that have the potential to be reduced more easily. The purpose is to identify potential discretionary or non-essential water uses.

Presently, Spring Hill has interconnection agreements with Columbia Power and Water Systems (CPWS) and Maury County Water System for emergency supply.

4. Drought Management Plan in the Context of an EOP

Development of the drought management plan is coordinated with Spring Hill's Emergency Operations Plan (EOP). While the EOP addresses broader emergencies (natural disasters, hazardous spills, civil disturbances), the drought management plan focuses solely on water supply and demand during drought conditions. The EOP is not available for public scrutiny.

The City's Water System drought management plan is a separate component of the Emergency Operation Plan (EOP). Unlike the EOP to which the drought plan is an "annex," the drought plan includes restrictions on some water uses and in some cases bans other water uses at times. The drought management plan will be adopted by the Board of Mayor and Aldermen.

5. Goals - Objectives and Priorities

The goal of the drought management plan is to provide water to all priority uses as established by the water system under worsening drought conditions. The water uses and levels of water availability take into account the maintenance of public health and safety, sustaining economic activity, preserving critical environmental resources and life activities.

Prioritized water uses during drought conditions:

1. Hospitals and medical care facilities
2. Nursing homes and elder care facilities
3. Human consumption (drinking, cooking, sanitation)
4. Fire protection
5. Pets and livestock
6. Environmental protection (aquatic habitats)
7. Commercial (restaurants, offices, retail)
8. Industrial (sanitation, processing)
9. Recreational uses (pools, parks)
10. Landscape and shrubbery watering
11. Lawn watering, vehicle washing

6. Interconnections, Mutual Aid, and Backup Sources

- Emergency water supply connections with Columbia Power and Water Systems (CPWS) and Maury County Water System.

7. Ordinances, Policies, and Legal Requirements

- Drought-related ordinances and policies will be made available at Spring Hill City Hall or on the City's website (www.springhilltn.org).
- Enforcement mechanisms (warnings, fines, service disconnections) will be detailed in the adopted ordinance.

8. Agency Coordination

Spring Hill operators will monitor:

- Duck River Agency
- USGS real-time flow data for Duck River
- Tennessee Drought Monitoring System
(http://www.drought.unl.edu/dm/DM_state.htm?TN,S)

Coordination with Tennessee Division of Water Resources will occur if trigger points are approached.

9. Phased Drought Management Strategy

Drought Management Phases and Responses

Stage 1 (Drought Alert) – DRATAC to get Forecasting Initiative

Trigger point: Reservoir Stage 1 Standard Operating Curve min out flow

Action: Monitor water quality at SHWTP Let DRA monitor TVA Reservoir discharges

Stage 2 (Drought Watch) - Voluntary Reduction

Trigger point: Reservoir level Stage 2 Operating Curve; TVA cut back flow 10 cfs at Shelbyville River Gauge

Action: All customers are requested to voluntarily reduce consumption of essential, domestic, and non-essential use.

Stage 3 (Drought Warning) - Mandatory Restrictions and Prohibited Activities

Trigger point: Reservoir level Stage 3 Operating Curve

Action: All customers-mandatory to reduce consumption of essential, domestic, and non-essential use. (Assumed 10% reduction)

Enforcement Under Mandatory Restrictions:

- First offense: Written warning
- Second offense: \$100 fine
- Third offense: Water service disconnection (minimum 15 days, reconnection fee applies)

Stage 4 (Drought Emergency) - Increased Mandatory Restrictions and Prohibited Activities

Trigger point: Reservoir level

Actions: All customers mandatory to reduce consumption of essential, domestic, and non-essential use. (Assumed 20% reduction)

- a) watering of lawns, flower and/or vegetable gardens, trees, shrubs, etc., prohibited unless for commercial use for resell
- b) water served for drinking purposes at restaurants or other public or non-public eating establishments are restricted to be served only as requested by the patron or customer.
- c) Normal scheduled fire hydrant flushing cut to bare minimum to meet TDEC requirements

Enforcement Under Emergency Management:

- First offense: Written warning
- Second offense: \$250 fine
- Third offense: Water service disconnection (minimum 30 days, reconnection fee applies)

10. Management Team

- Drought Manager: Water Plant Superintendent
- Support Team: Mayor, City Aldermen, City Administrator, Fire Chief, Police Chief, Public Works Director, EMA Director, City's Communications Director
- Activated upon Drought Alert status, meeting weekly thereafter.

11. Review, Evaluation, and Updates

The drought management plan will be:

- Reviewed every three years or six months after activation of any drought phase.
- Updated as necessary and presented to the Spring Hill Board of Mayor and Aldermen for adoption.

Adopted by Spring Hill City Board of Mayor and Aldermen on _____.