TOWN OF BRIGHTON

DROUGHT MANAGEMENT PLAN

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I. <u>INTRODUCTION</u>

Droughts cannot be avoided but their effects on water systems can be mitigated through proper planning and preparedness. This plan is not intended to replace existing emergency planning efforts or to add complex layers of planning, measuring and reporting to current operational procedures but rather this plan is to be incorporated into ongoing activities and exercises of the Town of Brighton.

Three interrelated goals of this drought management plan are:

- 1. Provide our customers with a clear, concise and fair plan that sets specific trigger points that reduce water consumption to certain levels dependent upon increased demand.
- 2. Provide adjacent water systems, especially Poplar Grove Utility District with a plan that emulates actions and precautions that the Town is taking.
- 3. Provide TDEC with a plan that meets the requirement set forth in the guidance documents developed in December 2009.

Authority and Applicability to Other Emergencies

The Town of Brighton is an incorporated town according to laws of the State of Tennessee and operates a public water system in Tipton County under this authority. The Town has a Board of Mayor and Aldermen that oversees the operation of the Town's water system through the appointment of a Public Works Director. The Public Works Director is responsible for the day to day operation of the water system and along with the Mayor, the implementation of this Plan. The Drought Management Planning Committee consist of the Town's Public Works Director and the Mayor.

While this Plan is prepared specifically in response to anticipated demand issues that might arise due to prolonged drought, the actions and preparations put in place should be applicable to other emergencies such as ice storms, earthquakes, flooding, etc. In any case, the Town's goal is to decrease demand as necessary to maintain domestic service to our customers as fully as possible.

Water System Characteristics

The Town's water system serves a population of approximately 3,700 in addition to three Tipton County schools. Our source for water is Poplar Grove Utility District. The District has four wells drawing from the Memphis Sands with a combined pumping capacity of 9.2 MGD.

The Town is supplied water through a six inch master meter interconnection with Poplar Grove Utility District at the intersection of Brighton-Clopton and Old Memphis Roads. This interconnection is capable of supplying the Town with 0.65 MGD at 40 psi which is approximately 1.5 times the Town's maximum daily demand for calendar year 2016.

The Town's distribution system consists of 2" through 10" water mains and two elevated storage tanks with a combined capacity of 375,000 gallons. Both elevated tanks are located on U.S. Highway 51 and connected by a 10" water main.

Water usage in the winter averages approximately 0.25 MGD, summer usage can be as high as 0.45 MGD with a daily average of approximately 0.28 MGD. Even at the high summer demand of 0.45 MGD, maintaining both elevated tanks at 50% full is not a problem for the Town's personnel.

LARGE USERS

The Town supplies up to 4,000 gallons per day to Well's Processing Inc. year round and up to 8,000 gallons per day to Oaklawn Garden Center during the summer months. The Town also supplies up to 100,000 gallons per day to the schools' ball fields during the summer months. Because these volumes are 35% of the Town's average daily flow through the master meter and this Drought Management Plan focuses on reduction of usage, the reduction of usage by these customers is a key component. This Plan incorporates voluntary reduction request, alternate day usage and mandatory reduction for each of these large volume customers.

TANK NAME	SIZE IN GALLONS	LOCATION
Woodlawn Tank	125,000	Corner of Highway 51 and Woodlawn Ave.
Highway 51 Tank	250,000	Highway 51 across from Middle School

II. DROUGHT MANAGEMENT PLANNING

Goals

The Town of Brighton has the goal of maintaining a safe and reliable water supply to its customers even in dry periods during the year. Because the Town has made significant investments in its elevated storage and distribution system infrastructure, it's not specifically a goal of the Town to restrict water usage during dry periods but to maintain an adequate supply to all water customers while monitoring elevated tank levels.

The Town's Drought Management Plan has four levels of response based on levels in our elevated storage tanks as shown in Section V of this Plan. Water demands are split into Critical and Optional (non-essential) uses. Critical uses are those pertaining to human consumption and Optional uses are those associated with recreation and outdoor watering. The primary goal of this Plan is to limit or eliminate Optional uses during drought situations, allowing Critical uses to continue as normal as possible.

Regional Planning

The Town's only interconnect is with Poplar Grove Utility District therefore, conditions within the distribution system of Poplar Grove have the potential of greatly effecting the water supply of the Town. Interconnects with other systems are not practical at this time because of the size of the nearest water mains belonging to First Utility District and the City of Covington. Because the Town has no alternate supply of water, Poplar Grove has assured the Town that it will endeavor to meet the Town's water supply needs even during events of drought. Likewise, the Town has assured Poplar Grove that it will cooperate in the curtailment of usage within its distribution system should curtailments be necessary by all distribution systems that are supplied by Poplar Grove.

III. EXISTING PLANS AND PARTNERSHIPS

Adjacent Systems

The Town maintains close working relationships with adjacent water systems including the Town of Atoka, the Cities of Munford and Covington, First Utility District and Poplar Grove Utility District. Of these neighboring systems, the Town's water system is only interconnected with Poplar Grove Utility District. The extremities of the Town's water distribution system are in close proximity to the distribution system extremities of First Utility District, the Town of Atoka and the City of Munford however, the Town does not currently interconnect with these of systems.

Communication and Enforcement

The Town will make this document available to the public by posting it on our website, townofbrighton.com. During drought phases, communication to the public will be made by a variety of means ranging from posting on our website, phone notification (to largest users) and communication with the news media in Covington and Memphis.

IV. AGENCY COORDINATION

The Town will maintain continuing contact with governmental agencies and other water systems in the event that conditions warrant actions concerning a drought situation. Those entities include:

- Other Water Systems>Poplar Grove Utility District
- Governmental Agencies
 >Tipton County Executive
 >Tipton County EMA
 >Tennessee Department of Agriculture
- Regulatory Agencies
 >TDEC-Division of Water Resources

V. DROUGHT MANAGEMENT PLAN PHASES

Following TDEC guidance in developing this Drought Management Plan, there are four distinct phases to drought emergencies:

- 1. Drought Alert Phase
- 2. Voluntary Reduction
- 3. Mandatory Reduction
- 4. Emergency Management

Trigger Points

The Trigger Points that will initiate the Town's Drought Management Plan are all based on the Town's inability to maintain certain elevated tank levels over certain periods of time.

These Trigger Points focus mainly on the reduction of consumption especially for Optional (Non-Critical) uses such as commercial use, lawn and plant watering, car washing, recreational use, etc.

Public Notice

In each of the tables that follow, there is a specific Trigger Point for demand, a corresponding reduction goal, a customer outreach plan and monitoring activities that are to take place for a given drought Phase.

DROUGHT ALERT PHASE

Lower than normal precipitation and greater than normal customer demand

Trigger Point: Any elevated tank level staying below 80% full for 3 or more consecutive days Reduction Goal: None

Customer Communication: -Post a notice on the Town's website

Monitoring Activities: -Review customer usage records to determine largest Optional (Non-Critical) users

> -Communicate with Poplar Grove Utility District concerning their elevated tank levels and WTP flows

-Notify TDEC's Memphis Office

VOLUNTARY WATER REDUCTION PHASE

Continued lower than normal precipitation and continued increase in customer demand

Trigger Point: Any elevated tank staying below 70% full for 5 or more consecutive days Reduction Goal: Reduce customer usage by at least 10% per day which should allow our elevated tanks to rise to 100% full over a 24 hour period.

Customer Communication: -Post a notice on the Town's website

-Notify largest users (Tipton County Schools, Oaklawn Garden Center and Well's Processing) that the Town has entered into the Voluntary Reduction Phase of its Drought Management Plan. -Request that all customers conserve water via the Town's website

Monitoring Activities: -Review customer usage records to determine largest Optional (Non-Critical) users

- -Monitor and record both elevated tanks' level every 6 to 8 hours
- -Communicate daily with Poplar Grove Utility District
- -Notify TDEC's Memphis office

Example Website Notification for Voluntary Water Reduction Phase

"The Town's water system has entered into the Voluntary Water Reduction Phase of its Drought Management Plan. At this time, we are asking that all customers reduce their water consumption by limiting the watering their lawns, washing vehicles or any other outdoor uses. If you have any questions, please call our office at 476-8661. Thank you for your cooperation in this matter."

MANDATORY WATER REDUCTION PHASE

Continued lower than normal precipitation and continued increase in customer demand

Trigger Point: Any elevated tank staying below 60% full for 3 or more consecutive days Reduction Goal: Reduce customer usage by at least 20% per day which should allow our elevated tanks to rise to more manageable levels over a period of two days.

Customer Communication: -Post a notice on the Town's website

- -Notify local media
- -Notify all users that outdoor watering, car washing, recreational uses and all other non-essential uses are to be stopped until further notice using the Town's website
- -Notify the Town's largest users (Tipton County Schools, Oaklawn Garden Center and Well's Processing) that the Town has placed them on an alternating water usage schedule. Tipton County Schools are to water only on Tuesdays, Thursdays and Saturdays while Oaklawn Garden Center and Well's Processing are to use water only on Mondays, Wednesdays and Fridays. No usage on Sundays because of already high demands.

Monitoring Activities: -Maintain contact with Poplar Grove Utility District

- -Monitor and record both elevated tanks' level every 4-6 hours
- -Monitor flows through the Master Meter to determine if daily water usages are increasing or declining
- -Maintain contact with TDEC's Memphis office

Example Website Notification for Mandatory Water Reduction Phase

"The Town's water system has entered into the Mandatory Water Reduction Phase of its Drought Management Plan. At this time, we are requiring all customers to limit their water consumption to only essential uses. If you have any questions, please call our office at 476-8661. Thank you for your cooperation in this matter."

-The notice that is supplied to the local media should be worded similarly to this website message.

EMERGENCY WATER MANAGEMENT PHASE

Continued lower than normal precipitation and continued increase in customer demand

Trigger Point: Any elevated tank staying below 50% full for 3 or more consecutive days Reduction Goal: Reduce customer usage by at least 30% which should allow our elevated tanks to rise to more manageable levels over a period of two to three days.

Customer Communication: -Post a notice on the Town's website

-Notify all users that outdoor watering, car washing, recreational uses and all other non-essential uses are to be stopped until further notice using the Town's website and by contacting the news media located in Covington and Memphis.
-Require all large users (Tipton County Schools, Oaklawn Garden Center and Well's Processing) cease all operations that require Optional (non essential) water usage

Monitoring Activities: -Maintain contact with Poplar Grove Utility District

-Monitor and record both elevated tanks' levels every 2-4 hours

-Monitor flows through the Master Meter to determine if daily water

usages are increasing or declining

-Maintain contact with TDEC's Memphis office

Example Website Notification for Emergency Water Management Phase

"The Town's water system has entered into the Emergency Water Management Phase of its Drought Management Plan. At this time, we are requiring that all water uses except for essential, life sustaining uses be stopped. Town employees will be patrolling the system to identify non-essential uses of water and notifying customers that these activities must stop at once. If you have any questions, please call our office at 476-8661. Thank you for your cooperation in this matter."

The notice that is supplied to the local media should be worded similarly to this website message.

VI. DROUGHT MANAGEMENT IMPLETATION

The four drought management phases as discussed in Section V of this Drought Management Plan will be implemented by the Public Works Director and/or Mayor. All Town officials and

personnel shall be familiar with this Plan and notified as the Plan is implemented by the Public Works Director and/or Mayor. All utility personnel shall monitor and record as directed by this Plan:

- -Elevated tank levels
- -Water pressure at the shop
- -Daily flows through the Master Meter

This information will be used in determining the drought phases and making a recommendation to the Public Works Director and/or Mayor regarding what phase is appropriate. The Trigger Points identified in Section V will be utilized in making such a recommendation.

ENFORCEMENT

During the Mandatory Water Reduction Phase or the Emergency Water Management Phase, Town employees will patrol the distribution system for noncompliance with the use restrictions. If necessary, Town employees may profile a customer's automated meter to determine compliance with use restrictions. If it is determined that a customer is not complying, the Town shall notify the customer either by phone, letter or in person. Such notification shall be documented by Town employees. Failure of the customer to comply after this notice is given may result in the termination of service until the drought has passed.

RATIONING

If rationing is required, it will be done according to the determined need of each household based on the number of occupants in each residence.

VII. <u>DROUGHT MANAGEMENT TEAM</u>

The Town designates the Public Works Director and/or Mayor as the person in charge of implementation of its Drought Management Plan. The Public Works Director and/or Mayor shall assign roles to each Town employee to implement this Drought Management Plan as the need arises. Town employees shall monitor the distribution system according to Section VI. Office staff shall update the website and notify local media as directed. Town employees shall patrol the distribution system for noncompliance as directed. Functional activation of this Plan will begin once the Trigger Point in the Drought Alert has been issued as set forth in Section V. All records will be maintained at Town Hall and the Public Works Director's Office.

Deactivation of the Plan will follow the same rational as activation of the Plan, in reverse order. Communication to the public shall be performed only by the Public Works Director, Mayor or designee.

VIII. MEDIA CONTACT INFORMATION

When the Mandatory Water Reduction Phase or the Emergency Water Management Phase is implemented according to the Trigger Points of this Drought Management Plan, the local media will be requested to notify the Town's customers. Below is a list of local media that should be notified during these Phases.

-WKBL Radio -WMC TV 5 -WREG Channel 3 Covington, TN Memphis, TN Memphis, TN

Phone #: 476-7129 Phone #: 726-0555 Phone #: 543-2333

-WHBQ FOX 13 -WATN TV 24 Memphis, TN Memphis, TN

Phone #: 320-1313 Phone #: 321-7673

IX. THE TOWN'S WEBSITE LINK TO DROUGHT MANAGEMENT PLAN

WWW.TOWNOFBRIGHTON.COM/DROUGHTMANAGEMENTPLAN

X. REVIEWS AND UPDATES

Once a drought event is completed, regardless of which phase is reached, the Public Works Director and/or Mayor will implement a review within 6 months of the event, of all actions leading up to the drought and all actions undertaken during and immediately after the event. This Drought Management Plan shall be updated every 3 years or more often if there is a significant change to the distribution system.

Adopted this 11 th day of April, 2017. Mayor Town Recorder Public Works Director	
Updated:	By:
Updated:	By:

Updated:______By:_____