

# **DROUGHT CONTINGENCY** **AND** **EMERGENCY WATER DEMAND MANAGEMENT PLAN**

## **1. INTRODUCTION**

The goal of this plan is to cause a reduction in water use in response to drought or emergency conditions so that the water availability can be preserved. Since emergency conditions can occur rapidly, responses must also be enacted quickly. This plan has been prepared in advance considering conditions that will initiate and terminate the rationing program.

Bethesda Water Supply Corporation produces its own groundwater and purchases water from other neighboring retail public water utilities. A major supplier of treated surface water is the City of Fort Worth, which has its own comprehensive Drought Contingency and Emergency Water Management Plan (May 2019). Bethesda is obligated by contract to adopt and follow the Fort Worth plan; however, in some instances a surface water Drought Contingency and Emergency Water Management Plan is not appropriate to meet the conditions of a dual supply water utility such as Bethesda. To meet its obligations to the City of Fort Worth while retaining the flexibility to meet the needs of its own water system, Bethesda formally adopts both the Fort Worth Plan and the following Drought Contingency and Emergency Water Demand Management Plan. Wherever there is a conflict or ambiguity between the two plans, the stricter of the two in addressing the situation at issue shall be followed.

A Drought/Emergency Management Committee consisting of two Board Members or Board appointees and the System Manager will monitor usage patterns and public education efforts and will make recommendations to the Board on future conservation efforts, demand management procedures or any changes to this plan. The Committee will develop public awareness notices, bill stuffers, and other methods that will begin and continue as a constant type of reminder that water should be conserved at all times, not just during a drought or emergency. This Committee will also review and evaluate any needed amendments or major changes due to changes in the WSC service area population, distribution system or supply. This review and evaluation will be done on a regular basis of five years unless conditions necessitate more frequent amendments.

This Drought Contingency and Emergency Management Plan outlines the triggers for the drought management stages. These stages are:

- Dry Conditions
- Stage I: Mild Conditions
- Stage II: Moderate Conditions
- Stage III: Severe Conditions

These stages can be triggered by supply, distribution system, and/or Bethesda wholesale provider (the City of Fort Worth Water Department).

## **PUBLIC INVOLVEMENT**

Provision for public input will be conducted using the following means:

- a) The WSC will provide notice of the proposed plan by posting public notice to request public

- input on the Plan.
- b) The WSC will provide a written copy of the Plan to anyone who requests it.
- c) The WSC will hold a public meeting to introduce and promote the Drought Contingency Plan before May 1, 2019.

## **PUBLIC EDUCATION**

The public will be educated about the Drought Contingency Plan using the following means:

- a) The Drought Contingency Plan will be available at Bethesda WSC's office.
- b) Bethesda will provide information through customer mail-outs.
- c) Bethesda's web site: [www.bethesdawatersupply.com](http://www.bethesdawatersupply.com)

## **4. COORDINATION WITH REGIONAL WATER PLANNING GROUP**

The service area of Bethesda WSC is located within Region C and Brazos G Regional Water Planning Group (RWPG). A copy of this Plan has been provided to these RWPG's.

## **5. MAIN COMPONENTS OF THE PLAN**

The WSC has set watering guidelines as outlined below. These guidelines become mandatory if stage I or any subsequent stage is initiated or if wholesale provider enacts additional conservation ordinances. The guidelines for the irrigation or watering of any lawn between the hours of 10:00 a.m. and 6:00 p.m. is prohibited year round except for hand watering and the use of soaker hoses.

- ◆Residential addresses ending in an even number (0, 2, 4, 6, and 8) may water on Wednesdays and Saturdays
- ◆Residential addressed ending in an odd number (1, 3, 5, 7, and 9) may water on Thursdays and Sundays.
- ◆All non-residential locations (apartment complexes, businesses, industries, parks, medians, etc.) may water on Tuesdays and Fridays.

## **6. TRIGGER CONDITIONS**

The Drought Emergency Management Committee is responsible for monitoring water supply and demand conditions on a monthly basis (or more frequently if conditions warrant) and shall determine when conditions warrant initiation or termination of each stage of the plan, that is, when the specified triggers are reached. The Committee will monitor monthly operating reports, water supply or storage tank levels and/or rainfall as needed to determine when trigger conditions are reached. The triggering conditions take into consideration: the vulnerability of the water source under drought of record conditions; the production, treatment and distribution capacities of the system, and member usage based upon historical patterns.

## **7. DROUGHT AND EMERGENCY MANAGEMENT STAGES**

### **Dry Conditions**

#### **Initiation:**

This stage is currently implemented full-time on a voluntary basis.

**Triggers:**

- Not Applicable

**Actions:**

- WSC reduces landscape watering.
- WSC continues it's ongoing education efforts
- WSC requests that residents voluntarily water twice per week per schedule. The WSC requires that there be no water between the hours of 10:00 a.m. and 6:00 p.m.

**Goal:**

This is a continuing stage.

**Termination:**

This stage remains continually in effect.

**Stage I – Mild Conditions**

**Initiation:** Stage I water allocation measures may be implemented when one or more of the following exist.

- Water consumption has reached 90 percent of the daily maximum supply for three (3) consecutive days.
- There is an extended period (at least eight (8) weeks) of low rainfall and daily use has risen 20 percent above the use for the same period during the previous year.
- Wholesale supplier drought Stage 1  
City of Fort Worth action

**Actions:**

- WSC will further reduce landscape watering.
- WSC will increase public information effort on water conservation.
- WSC will mandate restricted watering on an organized schedule of twice per week. Watering will be prohibited between hours of 10a.m. and 6p.m.
- Prohibit hosing off paved areas, buildings or windows, with no allowance for runoff or other water wastes.
- Use of water to fill, refill or add any indoor or outdoor swimming pools, wading pool or “Jacuzzi” type pool is prohibited except on designated days between the hours of 12:00 a.m. to 10:00 a.m. and 6 p.m. to 12:00 midnight
- Use of water from hydrants or flush valves shall be limited to maintaining public health, safety and welfare.
- New landscaping will be discouraged.
- All relevant state agencies will be notified.

**Goal:**

By the end of the first week after initiation, the WSC anticipates a 5% reduction in system demand.

**Exceptions:**

## **Residential**

Foundations may be watered up to two hours on any day using a handheld hose, soaker hose or drip irrigation system placed within 24-inches of the foundation that does not produce a spray of water above the ground.

Newly installed shrubs (first year) and trees (two years) may be watered up to two hours on any day by handheld hose, drip irrigation, a soaker hose or tree bubbler. Tree watering is limited to an area not to exceed the drip line of a tree.

Establishing new turf is discouraged. If hydro mulch, grass sod, or grass seed is installed for the purpose of establishing a new lawn, there are no watering restrictions for the first 30 days while it is being established. After that, the watering restrictions set forth in this stage apply. (This does not include overseeding with rye since turf already exists.)

All users are encouraged to reduce the frequency of draining and refilling swimming pools.

All users are encouraged to use native and adapted drought tolerant plants in landscaping.

Washing of any motor vehicle, motorbike, boat, trailer, airplane, or other vehicle shall be limited to the use of a hand-held bucket or a hand-held hose equipped with a positive-pressure shutoff nozzle for quick rinses. Vehicle washing may be done at any time on the premises of a commercial car wash or commercial service station. Companies with an automated on-site vehicle washing facility may wash its vehicles at anytime. Further, such washing may be exempt from these requirements if the health, safety and welfare of the public are contingent upon frequent vehicle cleansing, such as garbage trucks and vehicles used to transport food and perishables.

## **Commercial or Industrial**

All actions listed above for all water users apply to commercial and industrial users.

Stock at commercial plant nurseries is exempt from Stage 1 water restrictions.

Hotels, restaurants and bars are encouraged to serve drinking water to patrons on an “on demand” basis.

Hotels are encouraged to implement laundry conservation measures by encouraging patrons to reuse linens and towels.

### **Termination:**

Stage I of the Plan may end when all of the conditions listed as triggering events have ceased to exist for a period of three (3) consecutive days. Upon termination Dry Conditions Stage becomes operative.

## **Stage II – Moderate Conditions**

### **Initiation:**

Stage II water allocation measures may be implemented when one of the following conditions exist:

- Water consumption has reached 95 percent of the amount available for three (3) consecutive days.
- The water level in any of the water storage tanks cannot be replenished for three (3)

- consecutive days.
- Wholesale supplier drought Stage 2 City of Fort Worth action.

**Actions:**

- WSC will discontinue landscape watering except as needed to prevent foundation damage.
- WSC will increase public information efforts on the water supply.
- WSC will mandate and enforce watering restrictions of no more than once per week. Watering will be prohibited between the hours of 10a.m. and 6p.m.
- Water on paved areas (including runoff from garden watering) and hosing of pavements and buildings will be prohibited.
- New landscaping will be prohibited.
- Use of water from hydrants or flush valves will be limited to maintaining public health, safety and welfare.
- The WSC will notify relevant state agencies of the mandatory watering guidelines.
- Prohibit use of water for dust control, except as required to protect public health.
- Prohibit the operation of ornamental fountains or ponds that use potable water except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
- Prohibit filling of swimming pools with automatic valves.

**Goal:**

By the end of the first week after initiation of the plan, WSC anticipates a 10% reduction in system demand.

**Exceptions:**

**Residential**

Foundations may be watered up to two hours on any day using a handheld hose, soaker hose or drip irrigation system placed within 24-inches of the foundation that does not produce a spray of water above the ground.

Newly installed shrubs (first year) and trees may be watered up to two hours on any day by handheld hose, drip irrigation, a soaker hose or tree bubbler. Tree watering is limited to an area not to exceed the drip line of a tree.

Watering for dust control on skinned areas of sport fields is not allowed.

**Commercial and Industrial**

All actions listed above for all water users apply to commercial and industrial users.

Use of water from fire hydrants for any purpose other than firefighting related activities or other activities necessary to maintain public health, safety and welfare requires approval by the General Manager or designated representative. Fire hydrants use may be limited to only designated hydrants.

**Termination:**

Stage II of the Plan may end when all of the conditions listed as triggering events have ceased to exist for a period of three (3) consecutive days. Upon termination Dry Conditions Stage becomes operative.

### **Stage III – Severe Conditions**

#### **Initiation:**

Stage III water allocation measures may be implemented when one of the following conditions exist:

- Failure of a major component of the system or an event which reduces the minimum residual pressure in the system below 20 psi for a period of 24 hours or longer.
- Water consumption of 98 percent or more of the maximum available for three (3) consecutive days.
- Water consumption of 100 percent of the maximum available and the water storage levels in the system drop during one 24-hour period.
- Natural or man-made contamination of the water supply source(s).
- The declaration of a state of disaster due to drought condition in a county or counties served by the Corporation.
- Wholesale supplier drought Stage 3  
City of Fort Worth action
- Other unforeseen events which could cause imminent health or safety risks to the public.

#### **Actions:**

- WSC will immediately alert the public.
- WSC will discontinue landscape watering except as needed to prevent foundation damage. The daily watering restrictions will still be enforced for these exceptions.
- Landscape watering will be prohibited and no new landscaping may be established during this period. Foundation watering can be conducted by hand-held hose or watering cans.
- Water on paved areas (including runoff from garden watering) will be prohibited.
- Use of water to fill, refill or add any indoor or outdoor swimming pools, wading pool or “Jacuzzi” type pool is prohibited.
- All washing of vehicles is prohibited, except vehicles that need to be washed for health, sanitation or safety reasons. Any vehicle washing must occur at a commercial car wash.
- Use of water hydrants or flush valves will be limited to maintaining public health, safety and welfare.
- The WSC will notify relevant state agencies of the mandatory watering guidelines.

#### **Goal:**

The WSC will reduce system demand enough to address and rectify emergency situations as soon as possible.

#### **Termination:**

End of emergency situation.

## **INITIATION AND TERMINATION PROCEDURES**

Once a trigger condition occurs, the Corporation, or its designated responsible representative, shall, based on recommendation from the Chairperson of the Drought/Emergency Management Committee, decide if the appropriate stage of rationing shall be initiated. The initiation may be delayed if there is a reasonable possibility the water system performance will not be compromised by the condition. If water allocation is to be instituted, written notice to the customers shall be given.

Written notice of the proposed water allocation measure shall be mailed or delivered to each affected customer upon the initiation of each stage. The customer notice shall contain the following information:

- a. The date water allocation shall begin,
- b. The expected duration,
- c. The stage (level) of water allocations to be employed,
- d. Penalty for violations of the water allocation program, and
- e. Affected area or areas.

When the trigger condition no longer exists then the responsible official may terminate the water allocations provided that such an action is based on sound judgment. Written notice of the end of allocations shall be given to customers.

## **PENALTIES FOR VIOLATIONS**

For the first violation of a rationing provision a written warning shall be issued. Penalties per violation may be assessed for repeat offences as published in Section G (26) Bethesda Water Supply Corporations Tariff.

For subsequent violations, the Corporation may install a flow restriction device in the customer's service line (at customer's cost not to exceed \$100.00 or terminate service for up to 7 days and charge for the service call to restore service. These provisions apply to all customers of the Corporation.

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## **EXEMPTIONS OR WAIVERS**

The Drought/Emergency Management Committee may, in writing, grant temporary variance for existing water uses otherwise prohibited under this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the health or sanitation for the public or the person requesting such variance and if one or more of the following conditions are met:

- a. Compliance with this Plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the Plan is in effect.
- b. Alternative methods can be implemented which will achieve the same level of reduction in water use.

Persons requesting an exemption from the provisions of this Ordinance shall file a petition for variance with the Drought/Emergency Management Committee within 5 days after the Plan or a particular drought response stage has been invoked or after a condition justifying the variance first occurs. All petitions for variances shall be reviewed by the Committee and shall include the following:

- Name and address of the petitioner(s).
- Purpose of water use.
- Specific provision(s) of the Plan from which the petitioner is requesting relief.
- Detailed statement as to how the specific provision of the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Plan.
- Description of the relief requested.
- Period of time for which the variance is sought.
- Alternative water use restrictions or other measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
- Other pertinent information, as requested by the Committee.

Variances granted by the Committee shall be subject to the following conditions, unless specifically waived or modified by the Committee or Board of Directors:

- Variances granted shall include a timetable for compliance.
- Variances granted shall expire when the water allocation is no longer in effect, unless the petitioner has failed to meet specified requirements. No variance allowed for a condition requiring water allocation will continue beyond the termination of water allocation under Section F. Any variance for a subsequent water allocation must be petitioned again. The fact that a variance has been granted in response to a petition will have no relevance to the Committee's decision on any subsequent petition.

No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

## **IMPLEMENTATION**

The Board establishes a Drought/Emergency Management Committee by Resolution, the chairperson of which will be the responsible representative to make Drought and Emergency Water Management actions. This Committee will review the procedures in this plan as the situation requires or more frequently. Modifications may be required to accommodate system growth, changes in water use demand, available water supply and/or other circumstances.

This Plan was adopted by the Board at a properly noticed meeting held on **April 19, 2005**.

Revised by the Board at properly noticed meeting held on **April 16, 2019**.