

# **Watertown Water System Drought Management Plan**

The purpose of this plan is to be used as a guideline in the event water conservation practices are needed.

Last Update: April 22, 2025

## **PROGRAM OBJECTIVE**

The purpose of this Water Drought Plan is to provide policies, duties, and plans for the Watertown Water System that will be in place to avoid an emergency in a declared drought and water shortage. The system realizes that water is essential to life and that there is a limit to water's long-term availability. Rather than react to an emergency, this plan is to help the system's customers avoid reaching a water shortage condition.

## **BACKGROUND AND PURPOSE**

The Drought Plan outlines the Water System's water conservation and water demand management program. The objective of the water conservation program is to reduce the quantity of nonessential water used through efficient water practices. This will prepare the water system to continue to address its growth in the event of extreme drought conditions. The water conservation program provides procedures to be put in place throughout the water supply system to avoid a water shortage emergency. This plan is a resource to provide ways for businesses and our residents to aid in demand reduction. At advance stages of needed water demand reduction, management procedures also will include a prohibition of certain uses.

The City of Watertown Water System consists of two wells located along Hwy. 70 in the Ridley Limestone Aquifer. The feed water from these wells is disinfected with chlorine gas and a orthophosphate corrosion inhibitor is added. There is one tank with 400,000 gallons of storage fed by two high service pumps. The capacity of the treatment plant is approximately 500,000gpd. There is an emergency connection with Wilson County Water Authority capable of approximately 250,000gpd. Current average demand is 200,000gpd.

The overall goal of the Watertown Water System is to ensure the health, safety, and welfare of the citizens of the City of Watertown by providing an adequate potable water supply that exceeds State and EPA regulations.

## **DEFINITIONS**

- 1. Essential Use:** Use of water is strictly for firefighting, safety, sanitation, health and medical purposes, and the use of water to satisfy federal, state and local public health and safety requirements.
- 2. Domestic Use:** Any use of water for household purposes such as drinking, bathing, heating, cooking, sanitation or cleaning, whether the use occurs in a residence or in a commercial or industrial establishment and agricultural use for the watering of livestock.
- 3. Non-Essential Use:** All other uses for water other than Essential and Domestic Use.

## EVERYDAY WATER CONSERVATION

- **Water is too valuable to waste.** Water should not be allowed to run off into a gutter, ditch, or drain. Failing to repair a controllable leak is water waste.
- **Residential, commercial, industrial, and agricultural water users** should use common sense and best practices to avoid water waste.
- **Landscape watering with an irrigation system or sprinkler** should best be done between the hours of 8 p.m. and 10 a.m.
- **Hand watering** with a hand-held hose, drip irrigation or bucket is preferred for irrigation.
- **Washing impervious cover** such as parking lots, driveways, streets, or sidewalks should be done responsibly to avoid excessive runoff.

**Non-commercial washing of vehicles** and mobile equipment (e.g. washing vehicles at a residence) should best be done by use of an automatic shut-off nozzle or bucket of 5 gallons or less to prevent water waste.

## NOTIFICATION AND STAGE ACTIVATION PROCEDURES

\* Water customers shall be notified within 24 hours of any stage of this plan having been enacted. The Water System shall utilize the media outlets listed in the system's EOP by way of a press release from the Mayor's office stating which stage and actions of the Drought Plan have been enacted and when they will start being enforced. In addition, information of the current stage and prudent conservation practices will be included in the next cycle of billing following the press release. TDEC Division of Water Supply will be notified within 24hrs of any stage of this plan being activated as well as when any stage of this plan is terminated.

A list of prudent water conservation practices shall be communicated to the public every other year in the Consumer Confidence Report as printing space allows. Additionally, written information concerning water conservation practices shall be available to the public at City Hall. In addition, anytime that any stage of water restrictions is triggered, a list of water conservation practices shall be included with the media announcement using the media outlets in Watertown's EOP.

## **Stage 1- Drought alert phase**

### **GOAL**

Water system staff will be alerted to the potential for water reduction phases to be enacted and will be more diligent in monitoring of drought conditions and wasteful operations.

### **TRIGGERING CRITERIA**

The drought alert phase may be triggered by any one of the following:

1. Water supplies are low as a result of source water pumping capability dropping below 65% of the total plant capacity.
2. Water demand approached or exceeded 75% of delivery capacity for 30 consecutive (30) days.
3. Short-term deficiencies limit supply capability for any part of the system (as determined by the ODC or Mayor).

### **ACTIONS**

The ODC will take the following actions during the Drought Alert Phase with notification to the Mayor. The Mayor may also take other actions not listed, if deemed necessary. TDEC Division of Water Supply will be notified within 24hrs of the triggering event as well as when the event has ended.

#### **I. Water Treatment Plant**

- A. Plant operators will ensure plant efficiencies and pumping capabilities.
- B. Plant operators will monitor flow rates with increased scrutiny in anticipation of further actions under this plan.

#### **II. Water Distribution Team**

- A. Water distribution operators will intensify leak detection and repair activities.

- B. Water distribution operators will minimize flushing activities to those that are absolutely necessary to provide quality water.

#### **DURATION OF STAGE**

- A. The phase can be made effective for up to, but not more than 60 days from the date of publication/notification.
- B. Upon recommendation of the ODC, the water system may upgrade or downgrade the stage when the conditions triggering that stage occur.
- C. The Mayor may extend the duration of the stage for additional time periods not to exceed 120 days each.

The decision to terminate a stage will occur if the corresponding condition has subsided or been eliminated and if the corresponding trigger condition is no longer exceeded and would be unlikely to recur upon termination

## **Stage 2 – Voluntary Water Reduction**

### **GOAL**

Achieve a voluntary reduction in total gallons per capita per day (GPCD).

### **TRIGGERING CRITERIA**

Voluntary water awareness may be triggered by any one of the following:

1. Water supplies are low as a result of source water dropping below 50% of the total conservation storage.
2. Water demand approached or exceeds 75% of delivery capacity for seven (7) days.
- 3. Short-term deficiencies limit supply capability for all parts of the system.**
- 4. Contamination of the water supply occurs.**

### **ACTIONS**

The Certified Operator in Direct Charge will take the following actions during any voluntary conservation situation with notification to the Mayor. The Operator may also take other actions not listed, if deemed necessary. Public notification that this stage has been enacted will be placed

with the water bills and news media contacts. TDEC Division of Water Supply will be notified within 24hrs of the triggering event as well as when the reductions have ended.

**I. ALL WATER CUSTOMERS**

- A. Encourage reduction in frequency of watering new and first year landscaping and foundations.
- B. Encourage only initial filling of ornamental fountains.
- C. Encourage reduction in frequency of washing or rinsing of vehicles and recommend use of bucket/container, hand-held hose with positive shut-off or commercial car wash.
- D. Encourage reduction in frequency of recreational use.
- E. Encourage reduction of water use through **Voluntary Day of Week Watering Schedule**. Irrigation of landscaped areas with hose-end sprinklers or automatic irrigation systems should be limited to:

<b>LAST DIGIT OF ADDRESS</b>	<b>ALLOWED WATERING DAYS</b>
Even	Tuesday, Thursday, Saturday
Odd	Wednesday, Friday, Sunday

NOTE: Apartments, office building complexes, or other property containing multiple addresses may be identified by the lowest address number. Irrigation of landscaped areas is permitted at anytime if it is by means of a hand-held hose, a faucet filled bucket or drip irrigation system.

**II. UTILITY MANAGEMENT**

- A. Encourage reduction in landscape uses for city parks and Flower beds.
- B. Intensify leak detection and repair activities on water pipes and mains.
- C. Intensify inspections of construction sites to account for all water usage (metered).

**III. COMMERCIAL CUSTOMERS**

- A. Identify and encourage voluntary reduction measures by high volume water users through water audits. (See appendix A for list of commercial customers)
- B. Encourage reduction in water use for landscape nursery stock.
- C. **Encourage area restaurants to serve water by request only.**

#### **IV. DURATION OF STAGE**

- Stage 1 can be made effective for up to, but not more than 60 days from the date of publication/notification.
- Upon recommendation of the Certified Operator, the water system may upgrade or downgrade the stage when the conditions triggering that stage occur.
- The Mayor may extend the duration of the stage for additional time periods not to exceed 120 days each.
- The decision to terminate a stage will occur if the corresponding condition has subsided or been eliminated and if the corresponding trigger condition is no longer exceeded and would be unlikely to recur upon termination.

### **Stage 3 – Mandatory Water Restriction Phase**

#### **GOAL**

Achieve a 20% reduction in total gallons per capita per day (GPCD).

#### **TRIGGERING CRITERIA**

Water Restriction Phase may be triggered by any one of the following:

1. Water supplies are low as a result of source water dropping below 40% of the total conservation storage.
2. Water demand has reached or exceeded 85% of delivery capacity for seven (7) consecutive days.
3. Short-term deficiencies limit supply capability for all parts of the system.
4. Contamination of the water supply occurs.

#### **ACTIONS**

The Certified Operator in Direct Charge will take the following actions during any mandatory conservation situation with notification to the Mayor. The operator may also take other actions not listed, if deemed necessary. Public notification that this stage has been enacted will be placed with the water bills and news media contacts. TDEC Division of Water Supply will be notified within 24hrs of the triggering event as well as when the reductions have ended.

## I. ALL WATER CUSTOMERS

- A. Restrict operation of ornamental fountains or ponds to initial filling except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
- B. Prohibit recreational water use including use of faucets, hoses or hydrants, which uses water in such a manner as to allow run-off or other wastes.
- C. Prohibit washing of any motor vehicle, motorbike, boat, trailer, airplane, or other vehicle. Vehicle washing may be done at any time on the immediate premises of a commercial car wash or commercial service station. Further, such washing may be exempted from these regulations if the health, safety, and welfare of the public is contingent upon frequent cleansing, such as garbage trucks and vehicles used to transport food and perishables.
- D. Encourage further reduction in frequency of draining and refilling swimming pools.
- E. Prohibit hosing off paved areas, buildings, windows or other surfaces.
- F. Require reduction of water use through **Mandatory Day-of-Week Landscape Watering Schedule** and require watering only during off-peak hours. Irrigation of landscape areas with hose-end sprinklers or automatic irrigation systems shall be limited to:

<b>LAST DIGIT OF ADDRESS</b>	<b>ALLOWED WATERING DAYS</b>
Even	Sundays and Thursdays
Odd	Saturdays and Wednesdays

NOTE: Irrigation of landscape areas are further limited to the hours of 8:00 p.m. until 4:00 a.m. on designated watering days. Apartments, office building complexes, or other property containing multiple addresses may be identified by the lowest address number. Irrigation of landscaped areas is permitted at anytime if it is by means of a hand-held hose, a faucet filled bucket or drip irrigation system.

## II. UTILITY MANAGEMENT

1. Prohibit wet street sweeping and city vehicle washing or rinsing except where the health, safety, and welfare of the public is contingent upon frequent cleansing.
2. Prohibit flushing of new mains not immediately required to provide service.
3. Continue intensified leak detection and repair activities on water pipes and mains.
4. City government landscape watering is reduced.
5. Increase enforcement efforts.

### **III. COMMERCIAL CUSTOMERS**

- A. Continue to identify and encourage voluntary reduction measures by high volume water users through water audits.
- B. Require reduction of water use through day-of-week landscape watering schedule.
- C. Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle not occurring on the premises of a commercial car wash and commercial service stations and not in the immediate interest of public health, safety, and welfare is prohibited. Further, such vehicle washing at commercial car washes and commercial service stations shall occur only between the hours of 9:00 a.m. and 5:00 p.m.
- D. The filling, refilling, or adding of water to swimming pools, wading pools, ornamental ponds and fountains and Jacuzzi-type pools is prohibited.
- E. Foundation plantings may be watered for a two-hour period during off-peak hours with soaker or hand-held hose equipped with a positive shutoff nozzle. Use the watering schedule above.
- F. Operations of any ornamental fountain or pond for aesthetic or scenic purpose is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
- G. Watering of nursery plant stock is restricted to designated off-peak hours and day-of-week landscape watering schedule.
- H. Area restaurants shall serve water by request only.

### **IV. VIOLATIONS**

A person commits an offense if he/she knowingly or intentionally causes or permits use of water contrary to the measures implemented in the Drought Plan.

Any person classified as a water customer of the Watertown Water System, in apparent control of the property where a violation occurred or originated shall be presumed to be the violator, and proof that the violation occurred on the person's property shall constitute a rebuttable presumption that the person in apparent control of the property committed the violation. Any such person shall have the right to show the Mayor or his representative that he/she did not commit the violation. It is presumed that a person has knowingly made, caused or permitted such use if the mandatory measures have been formally ordered and any one of the following conditions met:

1. The manner of use has been prohibited by the Drought Plan.
2. The amount of water used exceeds that allowed by the Drought Plan

## **V. VIOLATIONS, WARNINGS AND PENALTIES**

- a.** A violation will occur during this stage if residential water is used in **excess of 10,000 gallons/month** or commercial water is used for non-essential restrictions.
  - i.** First Violation – Customer will be given a written warning that they have violated restrictions. Each day that one or more of the provisions in this Plan is violated shall constitute a separate offense.
  - ii.** Subsequent Violations - If a customer has been found to violate restrictions of this Plan, upon due notice to the customer, the Water System may discontinue water served to the premises. Services discontinued under such circumstances shall be restored only upon payment of a standard reconnection/cutoff charge of \$30 during regular business hours. The fee must be paid at the city office prior to service being restored.

## **VI. VARIANCES**

The Mayor or his designee 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, safety or welfare for the public or the person requesting such variance and all of the following condition is met:

The water customer requesting a variance must demonstrate the water use variance is for either essential or domestic use.

Persons requesting an exemption from the provisions of this Plan shall file a petition for variance with the Utilities Billing Department at City Hall, **within 14 days after the Voluntary phase has been invoked**. All petitions for variance shall be reviewed by the Mayor Works or his designee, and shall include the following:

- Name
- Purpose for 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 others if the petitioner complies with this Plan.
- Description of the relief requested.
- Period of time for which the variance is sought.
- Alternative water use restrictions of other measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
- Other pertinent information.

**Variances granted by the Water System shall be subject to the following conditions, unless waived or modified by the Water System:**

1. Variances granted shall include a timetable for compliance.
2. Variances granted shall expire when the Plan is no longer in effect, unless the petitioner has failed to meet specific requirements.
3. No variance shall be retroactive to otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

4. The Commissioner of public works may revoke a variance granted when conditions are not being met or are no longer applicable.

## **VII. DURATION OF PHASE**

- The phase can be made effective for up to, but not more than 60 days from the date of publication/notification.
- The Operator may extend the duration of the phase when the conditions triggering that phase occur.
- The Mayor may extend the duration of the phase for additional time periods, not to exceed 120 days.
- The decision to terminate a phase will occur if the corresponding condition has subsided or been eliminated and if the corresponding trigger condition is no longer exceeded and would be unlikely to recur upon termination

## **Stage 4—Emergency Water Restriction Phase**

### **GOAL**

Achieve an emergency reduction in total gallons per capita per day (GPCD) that will allow the water system to maintain a minimum distribution system pressure of 20psi.

### **TRIGGERING CRITERIA**

Water Restriction Phase may be triggered by any one of the following:

1. Water supplies are low as a result of source water dropping below 30% of the total conservation storage.
2. Water demand has reached or exceeded 95% of delivery capacity for five (5) consecutive days.
3. Short-term deficiencies severely limit supply capabilities for all parts of the system..
4. Contamination of the water supply occurs.

### **CONSERVATION ACTIONS**

The Operator in Direct Charge will take the following actions during any emergency water conservation situation with notification to the Mayor. The operator may also take other actions not listed, if deemed necessary. Public notification that this stage has been enacted will be placed with the water bills and news media contacts. TDEC Division of Water Supply will be notified within 24hrs of the triggering event as well as when the reductions have ended.

\*Customers will be advised that while the system is under the Emergency Water Restrictions phase, that water should be used for consumption, cooking, and hygiene only.

## **I. ALL WATER CUSTOMERS**

- A. Prohibit the filling of any pool, fountain, or pond except where necessary to preserve the life of pets, aquatic life, or livestock.
- B. Prohibit recreation water use including use of faucets, hoses or hydrants, which uses water in such a manner as to allow run-off or other wastes.
- C. Prohibit washing of any motor vehicle, motorbike, boat, trailer, airplane, or other vehicle at any location.
- D. Prohibit hosing off paved areas, buildings, windows or other surfaces.
- E. Prohibit the watering of any and all landscape areas by sprinklers, irrigation systems, or by hand.

## **II. UTILITY MANAGEMENT**

- 1. Prohibit wet street sweeping and city vehicle washing or rinsing.
- 2. Prohibit flushing of water mains unless necessary to provide chemically and biologically safe drinking water.
- 3. Continue intensified leak detection and repair activities on water pipes and mains.
- 4. Prohibit the watering of any and all city landscape areas.
- 5. Increase enforcement efforts.

## **III. COMMERCIAL CUSTOMERS**

- A. Continue to identify and encourage voluntary reduction measures by high volume water users through water audits.

- B. Prohibit the watering of any and all landscape areas by sprinklers, irrigation systems, or by hand.
- C. Prohibit the washing of any motor vehicle, motorbike, boat, trailer, airplane, or other vehicle. This is to include washing conducted at commercial car washes and service stations. All commercial car washes will be shut down until the emergency restriction is lifted.
- D. The filling, refilling, or adding of water to swimming pools, wading pools, ornamental ponds and fountains and Jacuzzi-type pools is prohibited.
- E. Operation of any ornamental fountain or pond for aesthetic or scenic purpose is prohibited.
- F. Watering of nursery plant stock is restricted to designated off-peak hours and day-of-week landscape watering schedule.
- G. Area restaurants shall serve water by request only.

#### **IV. VIOLATIONS**

A person commits an offense if he/she knowingly or intentionally causes or permits use of water contrary to the measures implemented in the Drought Plan.

Any person classified as a water customer of the Watertown Water System, in apparent control of the property where a violation occurred or originated shall be presumed to be the violator, and proof that the violation occurred on the person's property shall constitute a rebuttable presumption that the person in apparent control of the property committed the violation. Any such person shall have the right to show the Mayor or his representative that he/she did not commit the violation. It is presumed that a person has knowingly made, caused or permitted such use if the emergency measures have been formally ordered and any one of the following conditions met:

1. The manner of use has been prohibited by the Drought Plan.
2. The amount of water used exceeds that allowed by the Drought Plan.

#### **V. VIOLATIONS, WARNINGS AND PENALTIES**

- a. A violation will occur during this stage if residential water is used in **excess of 5,000 gallons/month** or commercial water is used for non-essential restrictions.

- i. First Violation – Customer will be given a written warning that they have violated restrictions. Each day that one or more of the provisions in this Plan is violated shall constitute a separate offense.
- ii. Subsequent Violations - If a customer has been found to violate restrictions of this Plan, upon due notice to the customer, the Water System may discontinue water served to the premises. Services discontinued under such circumstances shall be restored only upon payment of a standard reconnection/cutoff charge of \$30 during regular business hours. The fee must be paid at the city office prior to service being restored.

## **VII. VARIANCES**

No variances shall be granted during this phase.

## **VIII. DURATION OF PHASE**

- The phase can be made effective for up to, but not more than 60 days from the date of publication/notification.
- The Mayor may extend the duration of the phase when the conditions triggering that phase occur.
- The Mayor may extend the duration of the phase for additional time periods, not to exceed 120 days.
- The decision to terminate a phase will occur if the corresponding condition has subsided or been eliminated and if the corresponding trigger condition is no longer exceeded and would be unlikely to recur upon termination

## Sample Public Notice for Enacting Water Restrictions

Drought Contingency Plan Phase \_\_\_\_\_ Notice

ATTENTION ALL WATERTOWN WATER SYSTEM USERS

DATE: \_\_\_\_\_

The City of Watertown Water System has reached a triggering phase of its Drought Management Plan. This triggering phase was reached due to \_\_\_\_\_. This phase of the Drought Management Plan demands the following actions:\_\_\_\_\_.

These measures are in effect until:\_\_\_\_\_.

A copy of the Drought Management Plan can be found on the City of Watertown Website at: <https://watertowntn.com/government/utilities-documents/>

Please contact Watertown City Hall at (615) 237-3326 with specific questions.

