

# TOWN of WILLIAMSTON

# Ordinance to Adopt a Water Shortage Response Plan Ordinance No. 2010-12

Be it ordained by the Board of Commissioners of the Town of Williamston: that when triggers described below are met, the Town of Williamston's Mayor, will to implement a Water Shortage Response Plan (WSRP). In the Mayor's absence, the Mayor Pro Tempore will assume this role.

## Section 1. Purpose

The purpose of this ordinance is to ensure the availability of sufficient water supply to preserve public health and safety and to balance the availability and equitable distribution of limited potable water during drought or other adverse conditions. The ordinance provides for the declaration, monitoring, and enforcement of the official phases of a water shortage response plan during water supply shortage situations and the implementation of voluntary and mandatory water conservation measures throughout the Town's operation in the event a shortage is declared.

# Section 2. Definitions

- (a) "Allotment," as the term is used in this ordinance, shall mean the maximum quantity of water allowed for each customer over any applicable period as established in the water conservation provisions of this ordinance.
- (b) "Any Water," as the term is used in this ordinance, shall mean any type of water, including fresh water, brackish water, wastewater, or reclaimed water.
- (c) "Brackish Water," as the term is used in this ordinance, shall mean water containing more than 1000 parts per million of dissolved salts.
- (d) "Customer," as the term is used in this ordinance, shall mean any person using water for any purpose from the town's water distribution system and for which either a regular charge is made, or in the case of bulk sales, a cash charge is made at the site of delivery.
- (e) "Emergency," as the term is used in this ordinance, shall mean that water supplies are below the level necessary, to meet normal needs and that serious shortages exist in the area.
- (f) "Excess Use," as the term is used in this ordinance, shall mean the usage of water by a water customer in excess of the water allotment provided under the water conservation provisions of this ordinance for that customer, over any applicable period.
- (g) "Fresh Water," as the term is used in this ordinance, shall mean water withdrawn from surface or groundwater which has not been previously used, other than brackish water.
- (h) "Mandatory Conservation," as the term is used in this ordinance, shall mean that raw water supplies (i.e., stream flow, reservoir levels or groundwater levels) are consistently below seasonal averages, and if they continue to decline, may not be adequate to meet normal needs.
- (i) "Non-Residential Customer," as the term is used in this ordinance, shall mean commercial, industrial, institutional, public and all other such users, with the exception of hospitals and health care facilities.
- (j) "Reclaimed Water," as the term is used in this ordinance, shall mean wastewater which has been treated to allow reuse.
- (k) "Residential Customer," as the term is used in this ordinance, shall mean any customers who receive water service for a single or multi-family dwelling unit. The term residential customer does not include educational or other institutions, hotels, motel, or similar commercial establishments.
- (1) "Service Interruption," as the term is used in this ordinance, shall mean the temporary suspension of water supply, or reduction of pressure below that required for adequate supply, to any customer, portion of a water supply, or entire system.

- (m) "Voluntary Conservation," as the term is used in this ordinance, shall mean that conditions exist which indicate the potential for serious water supply shortages.
- (n) "Waste of Water," as the term is used in this ordinance, includes, but is not limited to (1) permitting water to escape down a gutter, ditch, or other surface drain, or (2) failure to repair a controllable leak of water due to defective plumbing.
- (o) "Wastewater," as the term is used in this ordinance, shall mean water which has been previously used for industrial, municipal, domestic, or other purpose, and has not been returned to the surface or groundwater source.
- (p) "Water," as the term is used in this ordinance, shall mean water available to the Town of Williamston treatment by virtue of its water rights or withdrawal permit or any treated water introduced by the Town into its water distribution system, including water offered for sale.
- (q) "Water Use Classes," as the term is used in this ordinance, shall be established as written in Section 4.

## Section 3. Plan Implementation

Several parameters or conditions may require the Town of Williamston to implement the WSRP. These include but may not be limited to:

- · significant reductions in well water levels,
- a significant increase in pump run times for the predetermined total flow at the well(s),
- · contaminants in the water system,
- · acts of terrorism or vandalism,
- · main breaks,
- natural disasters.

If the factors listed above reduce well water levels, increase pump run times or by any event or combination of events significantly hinder the water system's capacity to adequately deliver water, WSRP phases will be enacted in the following order:

Phase I – Voluntary Conservation will be enacted if a 20% reduction in normal well water levels is noted or if pump run times increase 20% in order to maintain previous rates or any other event which causes a 20% reduction in the water system's capacity. The Public Works Director or his designee shall, on a daily basis, monitor the supply and demand upon that supply. In addition the mayor (or his/her agent) is authorized to call upon all water customers to employ voluntary water conservation measures. Class 3 Non-Essential uses should be halted. Notification to employees and customers shall be publicized in a newspaper of general circulation in the area, the general news media, mailers, door hangers, public postings, or any other appropriate method. The town will terminate phase I activation at such time as the threat is no longer viewed as a significant threat to system operation.

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(See Addendum 3 – Water Conservation Measures)
(See Addendum 1 – Water Use Classifications)
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Phase II – Mandatory Conservation will be enacted if a 40% reduction in normal well water levels is noted or if pump run times increase 40% in order to maintain previous rates or any other event which causes a 40% reduction in the system's capacity. The Town shall continue to encourage voluntary water conservation measures defined under the Voluntary Conservation declaration, and further shall impose a ban on all Class 3 Non-Essential water uses. Notification shall follow the provisions outlined for voluntary conservation. Phase II activation will be terminated or phased down at such time as the threat is no longer viewed as a significant threat to system operation.

(See Addendum 1 – Water Use Classifications)

Phase III – Water Shortage Emergency will be enacted if a 60% reduction in normal well waters levels is noted or if pump run times increase 60% in order to maintain previous rates or any other event which causes a 60% reduction in the system's capacity. Class 1, essential Uses shall be identified, in specific, as targets for

voluntary conservation initiatives. Also, all Class 2, socially or economically important uses and Class 3, Non-Essential Uses shall be banned. If it is deemed necessary to further provide for the equitable distribution of critically-limited water supplies and assure that sufficient water is available to preserve public health and safety, more specific mandatory reduction measures may be enforced. Such measures may include mandatory usage reductions for businesses, household allotments based on the number of persons served, or temporary interruption of service. Under extreme conditions requiring mandatory reduction the following measures will apply:

Residential customers may be allotted 1000 gallons per month per person per connection. The following surcharges will apply for customers exceeding allotted usage.

Monthly usage of 1001 – 1250 gallons / person / connection will result in a 25% surcharge. Monthly usage of 1251 – 1500 gallons / person / connection will result in a 75% surcharge.

Monthly usage of 1501 or more gallons / person / connection will result in a 150% surcharge.

In order to maintain current water rates commercial, industrial, and institutional facilities will be required to reduce their monthly water consumption by 25% of the previous 12 – month water consumption average. Average water usage may be evaluated on an individual basis for customers with seasonal demand fluctuations.

A 10-24% water use reduction from the previous 12- month average usage will result in a 25% surcharge on the monthly billing.

A 0-9% usage reduction will result in a 50% surcharge on the monthly bill.

An increase of I-25% above the previous 12 month average usage will result in a 100% surcharge added to the next monthly bill.

Increased usage beyond 25% of the previous 12 month average will be surcharged at 150% of the monthly bill

These restrictions shall continue until the emergency is declared ended by the town's Mayor. Notification shall follow the provisions outlined for voluntary conservation. Phase III activation will be terminated or phased down at such time as the threat is no longer viewed as a significant threat to system operation.

(See Addendum 1 – Water Use Classifications) (See Addendum 2 – Interruption of Services)

# Section 4. Monitoring and Enforcement

The Town's Administrative Office and Public Works Department will have primary responsibility for monitoring compliance with the water conservation measures. Enforcement of these water shortage measures shall be enforced by the town through the town's public works and police department personnel. Suspected violations may be reported to the town office by phone at (252) 792-5142 or by contacting the town's public works department at (252) 792-1024.

# Section 5. Violations, Surcharges and Penalties

In addition to surcharges mentioned in Section 3, failure to comply with the mandatory conservation measures contained herein will result in a notice of violation and a civil penalty. For violations of Phase II conditions there will be a \$50.00 fine for the first offense. The fine will increase by \$50.00 for each subsequent offense. A fifth violation will result in discontinuation of service. Service may be restored upon return to Phase I conservation and payment of all applicable fees.

Violation of Phase III conditions will result in a \$100.00 fine for the first offense, \$350.00 for the second offense and discontinuation of service for the third offense. Service may be restored upon return to Phase I conservation and payment of all applicable fees.

Any customer or other person aggrieved by a decision or action imposing a civil penalty or other remedy for non-compliance with the requirements of this may file a complaint by calling town hall and issuing such complaints with the Town Administrator. The Town Administrator shall provide an opportunity for the customer or aggrieved party to rebut the finding of a violation, or provide evidence of circumstances beyond the customer's control which resulted in the violation. A record of evidence regarding disputed violations shall be kept, and a written notice of the Town's final decision and action in such cases

shall be provided to the customer or aggrieved party.



#### Section 6. Public Comment

Copies of the draft plan will be available upon request at the town office. The plans availability to the public will be advertised in the local newspaper and on the town's website. Public comments on the draft plan are invited and will be heard at the monthly board meeting held on May 3, 2010 at town hall.

# Section 7. Variance Requests

Applications for water use variance requests are available from the town hall. All applications must be submitted to the town hall for review by the town administrator or his designee. A decision to approve or deny variance requests will be determined within 2 weeks of submittal.

(Residential) If the mandated reductions in water usage cannot be obtained without imposing extraordinary hardship for individual customers, as in the case of special health related requirements, a revised reduction requirement for the particular customer may be established.

(Non-Residential) If the mandated reductions in water usage cannot be obtained without imposing extraordinary hardship which threatens health and safety, the non-residential customer may apply to the Town for a variance. For these purposes "extraordinary hardship" means a permanent damage to property or an economic loss which is substantially more severe than the sacrifices borne by other water users subject to this water conservation ordinance. If the reduction would cause an extraordinary hardship or threaten health or safety, a variance may be granted by the Town Administrator and a revised water use reduction requirement for the particular customer may be established.

Any person aggrieved by a decision relating to such a variance may file a complaint by calling town hall and requesting the Board of Commissioner's consideration of such complaint.

#### Section 8. Plan Effectiveness and Revision

The effectiveness of this plan will be evaluated following implementation, or every five years, through observation and comparison of the conservation goals and actual water use reduction data as well as reduction needs versus the frequency of plan implementation, number of violations, violation resolution, and reduction attained relative to previous usage.

Section 9. Severability If any provision of this ordinance is declared unconstitutional, or the application thereof to any person or circumstance is held invalid, the constitutionality and validity of the remainder of the ordinance and its applicability to other persons and circumstances shall not be affected thereby.

Section 10. Effective Date This ordinance shall take effect immediately upon adoption or passage by the Town's Board of Commissioners.

Town of Williamston

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#### WATER USE CLASSIFICATIONS

# WATER SHORTAGE RESPONSE ORDINANCE

#### ADDENDUM 1

#### Class 1: Essential Water Uses

#### Domestic Use:

## Water necessary to:

- sustain human life and the lives of domestic pets
- maintain minimum standards of hygiene and sanitation.

#### Health Care Facilities:

Patient care and rehabilitation, including swimming pools used for patient care and rehabilitation.

#### Public Use:

- Fire Hydrants
  - (1) Firefighting
  - (2) Certain testing and drills by the fire department if performed in the interest of the public safety and if approved by the town's Mayor or his designee.
- Flushing of Sewers and Hydrants: As needed to ensure public health and safety and if approved by the town's Mayor or his designee.

# Class 2: Socially or Economically Important Uses of Water

# All Domestic Uses Other Than Those Included in Classes 1 and 3:

- · Home water use including kitchen, bathroom and laundry use
- Minimal watering of vegetable gardens
- Watering of trees where necessary to preserve them

# Commercial, Agricultural, Industrial and Institutional Uses

- Outdoor commercial watering (public or private) using conservation measures and to the extent that sources of water other than fresh water are not available to use.
- Irrigation for commercial vegetable gardens and fruit orchards or the maintenance of livestock.
- Watering by commercial nurseries at a minimum level necessary to maintain stock.
- Water use by arboretums and public gardens of national, State, or regional significance where necessary to preserve specimens.
- Use of fresh water at a minimum rate necessary to implement vegetation following earth-moving, where such vegetation is required by law or regulation
- · Watering of golf course greens.
- Filling and Operation of Swimming Pools:
  - -Residential pools which serve more than 25 dwelling units.
  - -Municipal pools

- · Commercial Laundromats
- · Restaurants, clubs, and Eating Places
- Air Conditioning:
  - -Refilling for start up at the beginning of the cooling season
  - -Make-up of water during the cooling season
  - -Refilling specifically approved by health officials and the Town governing body, where the system has been drained for health protection or repair purposes.
- Schools, Churches, Motels/Hotels and Similar Commercial Establishments

### Class 3: Non-Essential Uses of Water

- Ornamental Purposes:
  - -Fountains, reflecting pools, and artificial waterfalls
- Outdoor Non-Commercial Watering (public or private)
  - -Gardens, lawns, parks, golf courses (except greens), playing fields and other recreational areas.
  - -Filling and operation of recreational swimming pools serving fewer than 25 dwellings
  - -Non-commercial washing of motor vehicles
  - -Serving water in restaurants, clubs, or eating places except by specific request.
  - -Air Conditioning: refilling cooling towers after draining except as specified in Class 1

#### Public Use:

-Fire Hydrants: any purpose, including use of sprinkler caps and testing fire apparatus and for fire department drills, except as listed in Class 1.

#### INTERRUPTION OF SERVICES

#### WATER SHORTAGE RESPONSE PLAN

# ADDENDUM 2

# Interruption of Services

The following provisions shall govern the implementation of temporary service interruptions:

- (a) 1. In order to effectuate compliance with this ordinance, the Town is hereby authorized and required to plan and implement temporary service interruption to all or part of its water supply system, as may be deemed appropriate, when any and/or all of the following conditions are determined to exist:
  - (i) The mandated reduction in system-wide usage has not been achieved, and/or
  - (ii) The mandated reduction in system-wide water usage has been achieved, but has failed to have a significant impact in extending limited water supplies, and/or
  - (iii) Temporary service interruptions are necessary in order to further extend limited and/or dwindling water supplies.
  - In the event it is determined that temporary service interruptions are necessary, the Town shall
    notify its customers through the public media (newspapers, radio, and television), at least one day
    prior to the temporary service interruptions, that a planned, temporary service interruption is to be
    imposed.

#### Such notice shall:

- (i) State the day or days when the planned, temporary service interruption will occur;
- (ii) State the time(s) when such planned, temporary service interruptions will commence, and the time(s) such interruption will cease;
- (iii) State whether the planned, temporary service interruptions are to be imposed on the entire system, or part thereof, and if only part(s) of the system will experience planned, temporary service interruptions, identify geographic boundaries within which such interruptions will occur; and
- (iv) Advise all customers within the areas affected by planned, temporary service interruptions how to treat any water received from the system, for human consumption, during the period(s) of such interruptions and for such additional time as may be necessary until full pressure is restored to the system.
- 3 If a planned, temporary service interruption is imposed as authorized and required by this ordinance, the Town must provide for the continued delivery of water to health care facilities within the area(s) affected by such interruptions, by means of any adequate, alternative delivery measures that may be necessary.
- 4. If a planned, temporary service interruption is implemented, the Town must make provisions, by any means possible, the continued delivery of such water as may be necessary for the proper operation of sewage collection, treatment, and disposal systems and facilities.
- (a) Meter reading schedules are authorized to be altered to assure adequate monitoring of compliance with this ordinance.
- (b) Any customer or other person aggrieved by a decision or action imposing an excess-use civil penalty or other remedy for non-compliance with the requirements of this ordinance may file a complaint with the Town Administrator and be provided an opportunity for the customer or aggrieved party to rebut the finding of a violation, or provide evidence of circumstances beyond the customer's control which resulted in the violation. A record of evidence regarding disputed violations shall be kept, and a written notice of the Town's final decision and action in such cases shall be provided to the customer or aggrieved party.

#### CONSERVATION MEASURES

#### WATER SHORTAGE RESPONSE ORDINANCE

#### ADDENDUM 3

#### CONSERVATION MEASURES

Direct users to adopt the following conservation measures:

#### INDOOR RESIDENTIAL USE:

Conservation for Voluntary and Mandatory Conservation Phases

- Use dishwasher only when they are full. Washing dishes by hand (don't let the tap run!) Saves about 25 gallons.
- · Adjust water level on clothes washing machines, if possible. Use full loads only, if not adjustable.
- Turn off faucets while brushing teeth, etc. Saves about 5 gallons per day.
- Reduce water used per flush by installing toilet tank displacement inserts. A plastic jug may often be used as an alternative. DO NOT USE BRICKS- they disintegrate when soaked and the resulting grit hinders closing of the flap valve.
- Do not use the toilet as a trash can.
- Use sink and tub stoppers to avoid wasting water.
- Keep a bottle of chilled water in the refrigerator for drinking.
- Find and fix leaks in faucets and water-using appliances. Faucets can usually be fixed cheaply and quickly by replacing washers.
- Adapt plumbing with flow-restricting or other water-saving devices. These are usually inexpensive and easy to install. See list of devices in Appendix E.
- Learn to read your water meter so you can judge how much water you use and what difference conservation makes.
- Take shorter showers and shallow baths. Saves about 25 gallons.
- Reduce the number of toilet flushes per day. Each flush uses about 5 gallons (2-3 if you have water saving toilets).
- · Don't use a garbage disposal
- Use non-phosphate detergent and save laundry water for lawns and plant.

Conservation for Emergency Conservation or Conservation (In addition to measures listed above).

- Turn off showers while soaping up.
- Use disposable eating utensils.

# OUTDOOR RESIDENTIAL USE

Conservation for Normal Conditions and Voluntary Conservation Phase

#### Lawns

- Water before 10:00 a.m. to prevent evaporation which occurs during the hottest part of the day. Morning is better than evening, when the dampness encourages growth of fungus.
- Water only when lawn shows signs of wilt. Grass that springs back when stepped on does not need
  water
- Water thoroughly, not frequently: long enough to soak roots. A light sprinkling evaporates quickly and encourages shallow root systems. Water slowly to avoid runoff.
- Don't let the sprinkler run any longer than necessary. In an hour, 600 gallons can be wasted.
- Allow maximum of one inch of water per week on your lawn. To measure, place cake tins outside to collect rain and water from sprinklers.
- Use pistol-grip nozzles on hoses to avoid waste when watering flowers and shrubs.
- Aerate lawns by punching holes 6 inches apart. This allows water to reach roots rather than run off surfaces.
- Position sprinklers to water the lawn, not the pavement.

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- Avoid watering on windy days when the wind not only blows water off target, but also causes excess
  evaporation.
- Keep sprinkler heads clean to prevent uneven watering.
- Adjust hose to simulate a gentle rain. Sprinklers that produce a fine mist waste water through evaporation.
- Know how to turn off an automatic sprinkler system in case of rain.
- Use an alarm clock or stove timer to remind you to shut off sprinklers that don't have timers.

# Vegetable and Flower Gardens

- Water deeply, slowly and weekly. Most vegetables require moisture to a depth of 6 to 8 inches.
- Keep soil loose so water can penetrate easily.
- Keep weeds out to reduce competition for water.
- Put the water where you want it and avoid evaporation by using soil –soakers or slow-running hoses, not sprinklers.

#### Trees and Shrubs

- Water deeply using a soil -soaker or drip-irrigation.
- Water only when needed. Check the depth of soil dryness by digging with a trowel.
- Mulch to reduce evaporation. A 2" to 3" layer of wood chips, pine needles, grass clippings, or straw keeps the soil cool in summer.
- Dig troughs around plants to catch and retain water.
- Water trees growing in full sun more often than those in shade.
- Do not use sprinklers. Apply water directly at base.
- Do not fertilize during the summer. Fertilizing increases a plant's need for water.
- Postpone planting until fall or spring when there is generally less need for water.
- Install trickle-drip irrigation systems close to the roots of your plants. By dripping water slowly, the system doesn't spray water in to the air. Use soil probes for large trees.
- Water when cloudy, at night, or even when a light rain is falling.

#### OUTDOOR RESIDENTIAL USE

Conservation for Voluntary conservation Phase (in addition to measures listed above).

- Do not allow children to play with hose or sprinklers.
- Limit car washing.
- Be ready to catch rainfall that occurs. Place containers under drain sprouts.
- Use leftover household water if available.
- Consider delaying the seeding or sodding of new lawns.
- Determine the amount of water being used outdoors by comparing water bills for summer and winter.

Conservation for Mandatory Conservation Phase (In addition to measure listed above).

- Vegetable gardens and food trees should be given minimal amounts of water on an individual basis only.
- Do not water lawns and inedible plants.
- Do not use sprinklers.

Most outdoor watering is prohibited under Emergency Conservation conditions.

#### HOSPITAL AND HEALTH CARE FACILITY USE

- Reduce laundry usage or services by changing bed linens, etc. only when necessary to preserve the health
  of patients or residents.
- Use disposable food service items.
- Eliminate, postpone, or reduce, as they may be appropriate, elective surgical procedures during the period of emergency.

## INDUSTRIAL USE



- Identify and repair all leaky fixtures and water-using equipment. Give special attention to equipment
  connected directly to water lines, such as processing machines, steam-using machines, washing
  machines, water-cooled air conditioners, and furnaces.
- Assure that valves and solenoids that control water flows are shut off completely when the water-using cycle is not engaged.
- Adjust water-using equipment to use the minimum amount of water required to achieve its stated purpose.
- Shorten rinse cycles for laundry machines as much as possible; implement lower water levels wherever possible.
- For processing, cooling, and other uses, either re-use water or use water from sources that would not adversely affect public water supplies.
- Advise employees, students, patients, customers, and other users not to flush toilets after every use.
   Install toilet tank displacement inserts; place flow restrictors in shower heads and faucets; close down automatic flushes overnight.
- Install automatic flushing valves to use as little water as possible or to cycle at longer intervals.
- Place water-saving posters and literature where employees, students, patients, customers, etc. will have access to them.
- Check meters on a frequent basis to determine consumptive patterns.
- Review usage patterns to see where other savings can be made.