



## City of Fort Worth **Business Smart** Program

# Water Conservation

Water conservation opportunities avail through domestic use, processes, equipment and irrigation. Every customer class can impact the current water demands. As one of the fastest growing cities in the nation, water conservation is necessary to ensure we can meet our booming population's needs with expansion and growth. Every step you take as a business to promote, reduce, retrofit or repair helps ensure sufficient supply for the future.

### **Water Conservation (25 points)**

#### **Prerequisite(s): Track and Report Your Water Usage for the Year**

**Background:** Knowing how much water you use is the first step towards water conservation.

**Required Action:** Use your monthly water bill to gauge your conservation efforts. Total water usage (all allocated meters) will be needed annually while you are a Business Smart member. If you need assistance determining this information, please contact Scheretta Scott at 817-392-8244 for assistance.

**Points:** Prerequisite to receive any Water Conservation points.

#### **Prerequisite: Be Current on all Permits (Industrial only)**

**Background:** Maintaining a current status on permits, inspections, and maintenance for all industrial pretreatment, grease abatement, and liquid waste disposal requirements is necessary to conduct business in Fort Worth.

**Required Action:** Learn about and complete all requirements for [industrial wastewater permits](#) if required for your business.

**Points:** Prerequisite to receive any Water Conservation points.

#### **Prerequisite: Complete a SmartWater Audit**

**Background:** An outside perspective and evaluation may disclose areas for water efficiencies that would otherwise be overlooked. Participation in the SmartWater Audit can help your business achieve water and energy efficiencies, while saving money.

**Required Action:** Sign up for a [SmartWater ICI audit](#). Work with contractors to evaluate and identify all water using processes. The final report outlines findings and recommendations with a return on investment. Share with management and others as a tool to save more.

**Points:** Prerequisite to receive any Water Conservation points.



## WC1

### Promote Water Conservation

**Background:** Educating employees about water conservation is vital to engage their support in your efforts to reduce water consumption. They can be a great help in identifying other ways to save.

**Recommended Action:** Use print and electronic media to increase awareness of water conservation. Include conservation tips in employee newsletters, create a forum for employees to make suggestions on ways to save, and post signs in high traffic areas like bath and break rooms. Learn more about [Ways to Save Water and Money in Your Business](#).

**Points:** 1 = Use printed, online, social media or other means to promote water conservation.

**Max Points:** 1

## Indoor Water Conservation

Opportunities for indoor water conservation at the workplace are usually associated with domestic use (toilets, faucets, and sink or food/dishwashing stations, showers) and process (water used in operational processes). Simple changes and/or retrofits can make a difference. Learn more about [saving water in the workplace](#).

## WC2

### Reduce Indoor Water Use

**Background:** There are many ways a company can reduce their indoor water use. Raising awareness about water conservation is a good first step. While people may conserve water in their own homes, they may need encouragement to do so at work.

**Recommended Action:** Establish water conservation goals based on historical water use and identify potential avenues of conservation. Take a look at water conservation tips and choose those that best fit your organization.

**Points:** 1 = 10% reduction

2 = 15% reduction

3 = 20% reduction

**Max Points:** 3

### WC3

#### Install Water-Conserving Toilets / High-Efficiency Toilets

**Background:** Toilets manufactured before 1994 can use up five gallons per flush. Water conserving, high-efficiency toilets use no more than 1.6 gallons per flush (gpf), creating an opportunity for significant savings with every flush.

**Recommended Action:** When retrofitting bathrooms, look for products with the WaterSense® label. [WaterSense®](#) is the EPA's recognized label of water efficiency. If you have tank style toilets, you may be interested in the [SmartFlush Toilet Program](#), which provides free toilets for commercial customers.

- Points:**
- 1 = 50% of existing or retrofitted toilets use 1.6 gpf or less
  - 2 = 100% of existing or retrofitted toilets use 1.6 gpf or less
  - 3 = 50% of existing or retrofitted high efficiency toilets that use 1.28 gpf or less
  - 4 = 100% of existing retrofitted high efficiency toilets that use 1.28 gpf or less

**Max Points:** 4

### WC4

#### Install Low-Flow Lavatory Faucets / Aerators

**Background:** Standard faucets can use up to four gallons per minute (gpm). Switching to low-flow faucets and/or aerators can significantly reduce water use. If replacing faucets, look for products bearing the WaterSense® label.

**Recommended Action:** Retrofit faucets with 1.5 gpm aerators (bathrooms) or 2.2 gpm (kitchen or laundry sinks).

- Points:**
- 1 = 50% of existing or retrofitted faucets use 1.5 gpm or 2.2 gpm based on fixture
  - 2 = 100% of existing or retrofitted faucets use 1.5 gpm or 2.2 gpm based on fixture

**Max Points:** 2

## Outdoor Water Conservation

Outdoor water use presents one of the greatest water-saving opportunities for businesses. Lush landscape, shrubs, and flower beds are typically overwatered; too much, too often. Watering sufficiently, maintaining the irrigation system, and fixing leaks are great ways to reduce use outside. Your business can track monthly usage on your water bill, especially if you have a separate irrigation meter.

### WC5

#### Reduce Water Used for Irrigation

**Background:** Outdoors, water is poured on landscapes to maintain curb appeal for the business facade. However, most turf and bed areas are overwatered. Making controller adjustments, converting shrub/bed areas to drip and reducing turf, can drastically reduce outdoor water use, and extend water supply.

**Recommended Action:** Evaluate and adjust the irrigation schedule to water deeply and less frequently. One inch of water penetrates 4-6" below ground and is sufficient every 5-7 days. Convert shrub or flower beds to drip irrigation and reduce turf areas where possible. Repair known leaks and schedule all watering before 10 a.m. and after 6 p.m. Learn more about [Irrigation Systems](#).

**Points:**

2 = 10% reduction in historical irrigation use of potable water from calculated three year average

4 = 20% reduction in historical irrigation use of potable water from calculated three year average

**Max Points:** 4

### WC6

#### Convert to or Install a Drip Irrigation System for Landscaping Beds

**Background:** Traditional irrigation heads spray water in the air to cover a broad area. Conversion to drip for landscape beds is much more efficient as no water is lost to evaporation. All water is applied at the root level where needed.

**Recommended Action:** Convert existing heads or install drip irrigation in landscaping beds.

**Points:** 2 = Convert or currently use drip irrigation system for landscaping beds.

**Max Points:** 2

## WC7

### Use Drought Tolerant and North Texas Adapted Plants in Landscaping Beds (Where applicable)

**Background:** Native Texas plants are adapted to the climate and have a higher chance of surviving the extremes of Texas weather. Including these in your landscaping beds with proper mulch will reduce water use and maintenance requirements.

**Recommended Action:** If replanting landscaping beds, or turf grass, consult with your landscaping company or landscape architect to choose plants that are native or adapted for this region. Visit [Texas SmartScape](#) for native/adaptive plant, shrub and tree selection for north central Texas.

**Points:** 1 = 50% (by square foot) of landscape beds include native or adapted plants

2 = 75% (by square foot) of landscape beds includes native or adapted plants

**Max Points:** 2

## WC8

### Proper Mulching

**Background:** Water applied directly to landscaping beds can evaporate more easily if there is nothing to shield the water from the Texas sun.

**Recommended Action:** Apply and maintain at least two inches of mulch in landscaping beds. The mulch will shield the soil from the sun, slow the evaporation of water, and reduce maintenance. Visit [Texas AgriLife Extension Service](#) for more information on mulching.

**Points:** 1 point = Apply and maintain at least two inches of mulch.

**Max Points:** 1

## WC9

### Conduct Monthly Maintenance on Outdoor Irrigation System

**Background:** If irrigation systems are not periodically checked, they are apt to lose efficiency and lead to water waste. Ensure controllers are checked for proper run-time scheduling, broken or misaligned sprinkler heads are repaired or adjusted, and spray distribution is sufficient for plantings.

**Recommended Action:** Conduct a monthly check-up and maintenance on irrigation systems. [Request a FREE Smart Irrigation Program audit](#) with the Fort Worth Water Department.

**Points:** 2 = Check your irrigation system monthly and make any necessary repairs or complete a Smart Irrigation Program audit.

**Max Points:** 2

## WC10

### Install a Cistern for Rainwater and/or HVAC System Condensate

**Background:** A cistern for rainwater collection or HVAC system condensate collection can be used to water plants instead of using potable water. Rain that falls on roofs normally flows to gutters and eventually to storm drains, ending up in local creeks.

**Recommended Action:** Install a cistern to capture and store rain water for use at a later time, possibly for landscaping purpose or cooling tower use. The [Texas AgriLife Extension Service](#) offers information about water collection. To calculate the rainwater potential of your building, download a [rainwater calculator](#).

Note: Rainwater capture devices require a permit for installation. Please contact Chief Plumbing Inspector Dennis McKinzie for more information, (817) 392-7980 or via email at [dennis.mckinzie@fortworthtexas.gov](mailto:dennis.mckinzie@fortworthtexas.gov).

**Points:** 2 = Install a rainwater harvesting or HVAC capture system.

**Max Points:** 2

## WC11

### Innovation in Green

**Background:** Design, implement and document a “green” achievement not listed here.

**Recommended Action:** Think outside the box and do something green that has a substantial and measurable impact on any part of the environment as it relates to transportation options. Submit your action to Business Smart for credit approval.

**Points:** 2 = per achievement in any of the WC, AT, EC, WM, or O segments of Business Smart.

**Max Points:** 4 for total Business Smart program