

Sample Water Audit Forms

BOMA GO-GREEN

Water Audit

Sample 1

Building Information

Building Name _____

Building Address _____

Owner _____ (and/or) Manager _____

Age of building _____ Size of building _____

Type of building: _____ Major use/s and area of each area type:

Office: _____ sf Other (specify: _____) _____ sf

Clinic: _____ sf Other (specify: _____) _____ sf

Warehouse: _____ sf Other (specify: _____) _____ sf

Retail: _____ sf

Numbers of permanent occupants: _____

(optional) Number of Women _____ Number of Men _____

Utility/Consumption Data

Water meter/s (utility meters):

	Meter #	Size	Area serving
Meter	_____	_____	_____
Meter	_____	_____	_____

Annual water consumption for meter # _____ consumption _____

Monthly consumption

Jan _____ Feb _____ March _____ April _____
May _____ June _____ July _____ Aug _____
Sept _____ Oct _____ Nov _____ Dec _____

Annual water consumption for meter # _____ consumption _____ m³
Monthly consumption:

Jan _____ Feb _____ March _____ April _____
May _____ June _____ July _____ Aug _____
Sept _____ Oct _____ Nov _____ Dec _____

Washrooms

Toilets

Tank type:

Number _____ @ _____ Gallons/litres per flush

Number _____ @ _____ Gallons/litres per flush

Number _____ @ _____ Gallons/litres per flush

Number _____ @ _____ Gallons/litres per flush

Tankless (flushometer equipped):

Number _____ @ _____ Gallons/litres per flush

Number _____ @ _____ Gallons/litres per flush

Number _____ @ _____ Gallons/litres per flush

Urinals

Flush tank:

Number of flush tanks: _____ Capacity of flush tank: _____ Gallons/litres

Number of urinals per tank: _____

Flush interval: _____

Manual flush:

Number _____ @ _____ Gallons/litres per flush

Number _____ @ _____ Gallons/litres per flush

Number _____ @ _____ Gallons/litres per flush

Sensor flush:

Number _____ @ _____ Gallons/litres per flush

Number _____ @ _____ Gallons/litres per flush

Number _____ @ _____ Gallons/litres per flush

Newer urinals and toilets have the gallons/litres per flush printed on the unit with the name of the manufacturer. Older toilets and urinals do not. If there is no indication on flush volume, note the manufacturer and the age of the toilet or urinal. With this information the manufacturer can provide flush volume information. The volume of the flush can be adjusted on these units. The flushometer manufacturer can provide the flush volume data or the data may be found in the building maintenance manuals.

Basins/faucets

of faucets _____ Flow rate _____ gpm/ls sensor/meter control

of faucets _____ Flow rate _____ gpm/ls sensor/meter control

of faucets _____ Flow rate _____ gpm/ls sensor/meter control

of faucets _____ Flow rate _____ gpm/ls sensor/meter control

Showers

Number of showers _____ Showerhead flow rate _____ gpm/ls

Number of showers _____ Showerhead flow rate _____ gpm/ls

Number of showers _____ Showerhead flow rate _____ gpm/l/s

Number of showers _____ Showerhead flow rate _____ gpm/l/s

Kitchens/Cafeterias/Lunch rooms

Number of meals served/day: _____

Number of kitchen sinks/ faucets: _____

Are kitchen faucets equipped with aerators? _____

Do spray heads have automatic shut off? _____

Are walk-in refrigerators/freezers water cooled? _____

Are refrigerators equipped with icemakers? _____

Do refrigerators provide drinking water? _____

Are icemakers water cooled? _____

Do kitchens use: garbage disposals composting neither

Is there a dishwasher? _____ Average number of loads per week: _____

Are only full loads washed? _____

Are dishes routinely pre-rinsed prior to wash? _____

Is frozen food routinely thawed under running water? _____

Are kitchen floors hosed clean? _____ How often? _____

Are hoses equipped with high-pressure, water efficient nozzles? _____

Number of Drinking fountains: not cooled _____ water cooled _____ air cooled _____

Number of Vending machines/ coffee makes/ water coolers/ etc. connected to the domestic water system:

Number of Ice machines: air cooled _____ water cooled _____

Mechanical (HVAC) Equipment

A/C Equipment

Are cooling towers in use at your facility? _____ Number: _____
(Check settings for level of total dissolved solids (TDS) at blow-down and frequency.)

Is makeup water metered? _____

Does your municipality provide for sewer charge rebates for cooling towers? _____

Are you receiving a rebate? _____

Heating Equipment

Are boilers in use at your facility? _____ Number: _____
(For steam boilers check settings for level of total dissolved solids (TDS) at blow-down and frequency.)

Is make up water metered? _____

Ancillary Equipment

Are water-cooled air compressors in use? _____

Are water-cooled pumps in use? _____

Is make up to heating and cooling loops metered, monitored and logged? _____

List any other machines that use domestic water:

Are water softeners in use? _____ Number: _____

Is softener regeneration automated? _____

If automatic regeneration, is it initiated by: time meter sensor

Is resin cleaner used? _____

Cleaning/Janitorial

Are janitorial staff aware of office water conservation efforts? _____

Parking Areas

Are hoses used for cleaning parking areas? _____

Are hoses equipped with fine-spray/high-pressure/water-efficient nozzles? _____

Are dry-clean (rather than wet-clean) practices and procedures in place? (i.e. sweep instead of hosing, scrape before spraying, etc.) _____

Walkways

Are office sidewalks and outside walls pressure-washed on a regular basis? _____

How often? _____

Landscaping/Irrigation

Does your landscape use mulch? _____

Are drought-tolerant, native plants used? _____

Does your facility have an automatic irrigation system? _____

What does the system irrigate? _____

How often? _____ At what time of day ? _____

Is there a rain gauge and/or rain sensor incorporated in your system? _____

Are there manual override controls for your system? _____

Is your irrigation water metered? _____

Is there a municipal sewer charge rebate on irrigation water? _____

Do you receive a rebate? _____

Do you use drip irrigation for plantings, trees and shrubs? _____

Are hoses used for irrigation? _____

Are hoses equipped with fine-spray/high-pressure/water-efficient nozzles? _____

Does your facility have any pools or fountains? _____ Number: _____

When are fountains running? _____

Do fountains use recycled water? _____

Are they part of a closed-loop system? _____

Maintenance Issues

Are faucets, pipes and plumbing checked regularly for leaks? _____

How often? _____

Are maintenance staff to respond to and repair leaks? _____

If you control your own maintenance program:

How do you handle reporting and repair of leaks? _____

What priority is given to and how quickly are leaks usually repaired? _____

Planned Action:

In this section planned actions to reduce water consumption should be listed. For example if your building is using 20 litres per flush toilets the action may be to change those out for low flush toilets (6 litres per flush).

Water Audit Guide

Sample 2

This data collection guide is designed to help you analyze water use in your facility.
Some items may not apply to all facilities.

Agency: _____

Facility Name: _____

Address: _____

Date of Assessment: _____

Audit Coordinator(s): _____

Assessment Team Members: _____

As you tour your facility and consider each point of water consumption, determine whether each use is essential or non-essential. Check the box in the left column to mark essential uses.

Background

Baseline water usage: _____

Local water provider: _____

Where does your water come from? _____

Number of buildings at facility: _____ Size of buildings (area): _____

Area of grounds: _____ Size of motor pool (# of vehicles): _____

Number of employees per shift: _____ Number of shifts per day: _____

Average number of visitors/occupants per day (if applicable): _____

Water pressure at your facility: _____ (psi)

(Often reducing water pressure by merely 10 or 15 percent can reduce water consumption significantly without interfering in daily consumption activities. Water pressure that is too high can result in leaks.)

Does staff have good general water conservation awareness habits? ☐ Yes ☐ No

Have you ever had a water-balance or leak-check? ☐ Yes ☐ No

(Entails shutting off all known water usage. If the meter records any water usage during this period, you have a leak or undocumented consumption.)

Is there an on-site water treatment facility? ☐ Yes ☐ No

If so, give a brief description of the facility, flow rates, chemical additions, and average cost (per unit volume).

Is there an on-site wastewater treatment facility? ☐ Yes ☐ No

If so, give a brief description of the facility, flow rates, chemical additions, and average cost (per unit volume).

Size, type, and location of water meter(s): _____ Size, type,
and location of wastewater meter(s): _____

Describe the amount, location, and use of untreated groundwater if you use it at your facility:

What, if any, water efficiency measures are already in place? _____

Personal Water Consumption

Number of restrooms: _____ Number of toilets (total): _____

Note: Many fixtures have the average flow rate printed on the fixture itself, along with the make and model. If you cannot find this printed information, consult your maintenance staff or facility manager.

Type of toilets and average water consumption in gallons per flush (gpf):

*Note: Most toilets are either gravity flush, flush valve/flushometer/tankless, or pressurized tank types.

Toilet type: _____ Number: _____ Average gpf: _____

Toilet type: _____ Number: _____ Average gpf: _____

Urinal model: _____ Number: _____ Average gpf: _____

Are toilets equipped with toilet dams or low-flow flapper valves? ☐ Yes ☐ No

Do flush valve (tankless) toilets have water-saving diaphragms? ☐ Yes ☐ No

Are toilets equipped with automatic water-flushing systems? ☐ Yes ☐ No

If so, what is the timing cycle? _____

Are the sensors/timers coordinated with regular work hours? ☐ Yes ☐ No

Total water consumption per workday from toilet flushes: _____

* Assuming each employee/occupant uses the bathroom 4x per workday

Number of restroom faucets (total): _____ Faucet flow rate: _____ gpm

Are faucets equipped with aerators? ☐ Yes ☐ No

Are faucets equipped with automatic or metered shutoff mechanisms? ☐ Yes ☐ No

Number of showers (total): _____ Showerhead flow rate: _____ gpm

Number of drinking fountains: _____ Fountain flow: _____ gpm

Are fountains ☐ air-cooled or ☐ water-cooled?

Kitchens

Number of staff kitchen areas: _____

Number of kitchen sinks/ faucets: _____ Faucet flow rate: _____ gpm

Are kitchen faucets equipped with aerators? ☐ Yes ☐ No

Do refrigerators use water coolant systems? ☐ Yes ☐ No

Are refrigerators equipped with icemakers? ☐ Yes ☐ No

Are icemakers: ☐ Water-cooled ☐ Air-cooled

Do refrigerators provide drinking water? ☐ Yes ☐ No

Do kitchens use: ☐ garbage disposals ☐ composting ☐ neither

Is there a dishwasher? ☐ Yes ☐ No

Average number of loads per week: _____

Cafeterias

Number of kitchen areas: _____ Area: _____

Number of faucets (total): _____ Faucet flow rate: _____ gpm

Are faucets equipped with aerators? ☐ Yes ☐ No

Are faucets equipped with flow restrictors? ☐ Yes ☐ No

Number of dishwashers: _____ Make & Model: _____

Average number of loads per day: _____ Water consumption per load: _____

Are dishes pre-washed? ☐ Yes ☐ No

Is potable water used for pre-washing dishes? ☐ Yes ☐ No

Is dishwasher wastewater reused? ☐ Yes ☐ No

Does the flow of water to the dishwasher stop when the flow of items being washed stops? ☐ Yes
☐ No

Does the flow of water to the garbage disposal stop when the disposal motor stops? (Many disposals have two water-supply lines, one to the bowl and one to the grinding chamber. Check both.) ☐ Yes ☐ No

Number of ice machines: _____ Are ice machines ☐ air-cooled or ☐ water-cooled?

Number of refrigerators: _____

Do refrigerators use water coolant systems? ☐ Yes ☐ No

Is frozen food routinely thawed under running water? ☐ Yes ☐ No

Do steam tables on buffet lines use potable water? ☐ Yes ☐ No

What is done with water from steam tables at closing time? _____

Are kitchen floors hosed clean? ☐ Yes ☐ No How often? _____

Are hoses equipped with high-pressure, water efficient nozzles? ☐ Yes ☐ No

Are linens washed on-site? ☐ Yes ☐ No How often? _____

Laboratory Consumption

Number of Labs (total in facility): _____

Number of sinks/ faucets: _____ Faucet flow rate: _____ gpm

Are faucets equipped with aerators? ☐ Yes ☐ No

List lab equipment that uses water in any way:

Equipment	Amount used	Closed-loop?	Potable? Reused?
_____	_____	<input type="checkbox"/> Y <input type="checkbox"/> N	_____
_____	_____	<input type="checkbox"/> Y <input type="checkbox"/> N	_____
_____	_____	<input type="checkbox"/> Y <input type="checkbox"/> N	_____
_____	_____	<input type="checkbox"/> Y <input type="checkbox"/> N	_____
_____	_____	<input type="checkbox"/> Y <input type="checkbox"/> N	_____
_____	_____	<input type="checkbox"/> Y <input type="checkbox"/> N	_____

Describe lab procedural/clean-up practices that consume water. _____

Are procedures and clean-up practices posted in the lab? ☐ Yes ☐ No

Mechanical Consumption

Number of water heater(s): _____ Size: _____

Are water softeners in use? ☐ Yes ☐ No Number: _____

Backwash? Frequency: _____ Duration: _____

Are drink machines in vending areas ☐ air-cooled or ☐ water-cooled?

Are cooling towers in use at your facility? ☐ Yes ☐ No Number: _____

For each cooling tower, approximate how much make-up water is needed or used to replace water lost to blow-down, evaporation, and other process inefficiencies.

Check settings for level of total dissolved solids (TDS) at blow-down and frequency.

Are boilers in use at your facility? ☐ Yes ☐ No Number: _____

For each boiler, approximate how much make-up water is needed or used to replace water lost to blow-down, evaporation, and other process inefficiencies.
Check settings for level of total dissolved solids (TDS) at blow-down and frequency.

Are water-cooled air compressors in use? ☐ Yes ☐ No

Are water-cooled pumps in use? ☐ Yes ☐ No

List any other machines that use non-contact cooling water:

Heating, Ventilating and Air Conditioning (HVAC) Consumption

What type of HVAC system do you have? _____

Does your HVAC system have condensate collection and/or re-use? ☐ Yes ☐ No

Is your HVAC system always on? ☐ Yes ☐ No

Is your HVAC system ☐ air-cooled or ☐ water-cooled?

If water-cooled, is your system ☐ open loop or ☐ closed-loop?

Cleaning Use

Motor Pool:

Number of automobiles: _____ Where are they washed? _____ How frequently? _____

Number of watercraft: _____ Where are they washed? _____ How frequently? _____

Are hoses used? ☐ Yes ☐ No

Are hoses equipped with fine-spray/high-pressure/water-efficient nozzles? ☐ Yes ☐ No

Are dry-clean (rather than wet-clean) practices and procedures in place? (i.e. sweep instead of hosing, scrape before spraying, etc.) ☐ Yes ☐ No

Are office windows washed on a regular basis? ☐ Yes ☐ No

How often? _____

Are office sidewalks and outside walls pressure-washed on a regular basis? ☐ Yes ☐ No

How often? _____

Janitorial Use

Are janitorial staff aware of office water conservation efforts? ☐ Yes ☐ No

Are there areas that janitors mop? ☐ Yes ☐ No Where: _____

Area mopped (ft²): _____ How often? _____

Are hoses used? ☐ Yes ☐ No

Are hoses equipped with fine-spray/high-pressure/water-efficient nozzles? ☐ Yes ☐ No

Are dry-clean (rather than wet-clean) practices and procedures in place? (i.e. sweep instead of hosing, scrape before spraying, etc.) ☐ Yes ☐ No

List other janitorial practices that consume water.

Task	Where	How often	Average water used
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Landscaping Consumption

What types of vegetation are planted in the landscaping surrounding your facility?

Plant Name	Native?	Average water consumption
_____	<input type="checkbox"/> Y <input type="checkbox"/> N	_____
_____	<input type="checkbox"/> Y <input type="checkbox"/> N	_____
_____	<input type="checkbox"/> Y <input type="checkbox"/> N	_____
_____	<input type="checkbox"/> Y <input type="checkbox"/> N	_____
_____	<input type="checkbox"/> Y <input type="checkbox"/> N	_____
_____	<input type="checkbox"/> Y <input type="checkbox"/> N	_____
_____	<input type="checkbox"/> Y <input type="checkbox"/> N	_____
_____	<input type="checkbox"/> Y <input type="checkbox"/> N	_____
_____	<input type="checkbox"/> Y <input type="checkbox"/> N	_____
_____	<input type="checkbox"/> Y <input type="checkbox"/> N	_____

Soil type (in your region): _____ Does your landscape use mulch? ☐ Yes ☐ No

Does your facility have an irrigation system? ☐ Yes ☐ No Type: _____

Where does the system irrigate? _____

How often? Summer: _____ Winter: _____

Time of day? Summer: _____ Winter: _____

Is there a rain gauge incorporated in your system? ☐ Yes ☐ No

Are there manual override controls for your system? ☐ Yes ☐ No

Are hoses used for irrigation? ☐ Yes ☐ No

Are hoses equipped with fine-spray/high-pressure/water-efficient nozzles? ☐ Yes ☐ No

Does your facility have any pools or fountains? ☐ Yes ☐ No Number: _____

Where? _____

When are fountains running? _____ Typical water consumption? _____

Do fountains use recycled water? ☐ Yes ☐ No

Are they part of a closed-loop system? ☐ Yes ☐ No

Are paved areas ☐ swept clean ☐ blown clean or ☐ hosed?

Maintenance

Are faucets, pipes and plumbing checked regularly for leaks? ☐ Yes ☐ No

How often? _____

Is there regularly scheduled preventive maintenance in your facility? ☐ Yes ☐ No

Is maintenance documented with standard records or inspection logs? ☐ Yes ☐ No

If you contract with a maintenance company:

How quickly does maintenance staff respond and repair leaks? _____

If you control your own maintenance program:

How do you handle reporting and repair of leaks? _____

How quickly are leaks usually repaired? _____

Contractor Water Use

Are contractors aware of agency water conservation efforts? ☐ Yes ☐ No

Do any contractors have access to or use of facility water? ☐ Yes ☐ No

Do contractors know where the water line is located? ☐ Yes ☐ No

(Oftentimes, contractors accidentally drive heavy equipment over water lines, cracking the piping and causing expensive leakage and potentially dangerous ground saturation.)

List any contractor activities that consume water. (regular, occasional or one-time)

Activity	Location	Frequency/Season	Water used
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Notes/ Other Water Consumption