



# **WATER-SAVING FIXTURE INSTALLATION GUIDE**

**Thank you for your interest in water conservation.  
The Massachusetts Water Resources Authority (MWRA)  
and the Boston Water and Sewer Commission are pleased  
to offer you this water saving fixture kit.**



## **How Much Water Do You Use?**

Water covers about 80% of the Earth's surface, but only 1% of fresh water is available for drinking, cooking and bathing. Each of us uses more than 60 gallons of water per day. That adds up to over 20,000 gallons of water per person, per year. With very little effort, we can all save water. You can save over 2,100 gallons per year just by reducing your water use by 6 gallons per day! This water-saving fixture kit will help you to get started.

## **We Want to Help You to Save**

MWRA is responsible for providing fresh, clean drinking water to nearly 2.2 million people in Massachusetts. We encourage residents and businesses in our customer communities to help conserve our most precious resource. Installing these water-saving fixtures in your home will help you to save water. You could also see savings in your water bill, depending on how much water your home's existing fixtures use.



## **Working with Your Community, We're Making Our Water Systems More Efficient**

MWRA and local water departments regularly perform tests to detect leaks in underground water pipes. Through this program, thousands of leaks have been found and fixed. MWRA also has a ten-year financial assistance program to allow communities to replace or rehabilitate old and corroded water pipes. Pipeline maintenance and improvement programs like these help to keep water systems running efficiently. They also ensure that your home's tap water is of the highest quality possible.

**Together, we have the potential to save millions  
of gallons of water each day for future generations.**

# TOILET DAMS

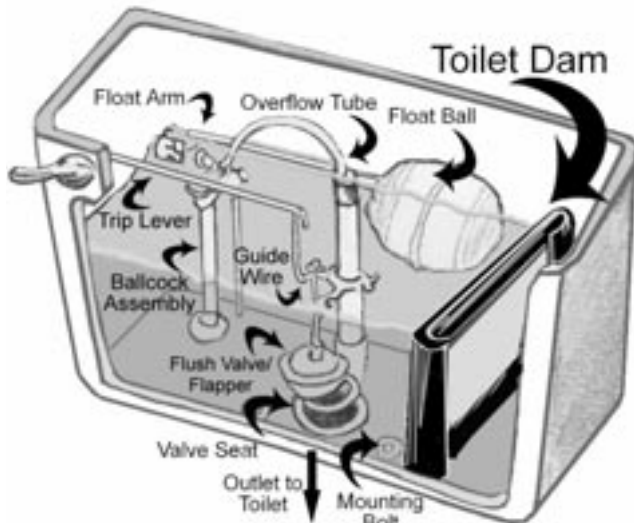
## How Much Water Does Your Toilet Use?

Next to your washing machine, your toilet can be one of the biggest water-wasters in your home. Depending on the age of your toilet, you could be using anywhere between 3.5 and 7 gallons of

water per flush. Leaks are another source of wasted water from the toilet. We highly recommend that you periodically check your toilet for leaks. One silent toilet leak can waste several hundred gallons of water a day.

We also recommend that you consider replacing older, 3.5 - 7 gallon per flush toilets with 1.6 gallon per flush models. You can automatically and permanently reduce your bathroom water use by more than half. In the meantime, try using a toilet tank dam to save up to a half gallon per flush.

Using a toilet tank dam or other toilet retrofit device can save thousands of gallons of water per year. For best results, use one toilet dam on 3.5 gallon toilets. If you happen to live in



### Where to install a toilet dam

an older home with original fixtures, you may be flushing at a rate of 5 to 7 gallons per flush. Under these conditions, you can install two dams in your toilet tank.

### Installing a Toilet Dam

**Step 1:** Remove the cover from the tank.

**Step 2:** Flush and gently hold up the float arm or shut off the water supply to prevent the tank from refilling. Allow all the water to empty.

**Step 3:** Gently flex the dam and place it on the right side of the tank. The rubber edges of the dam should rest firmly on the bottom and sides of the toilet tank. Slide the dam toward the center flush/flapper valve, placing it just in front of the mounting bolt.

**Step 4:** Release the float arm or open the valve to allow the tank to refill. Flush and check to see that the dam is holding back the water and has not slipped out of position. If the toilet does not flush completely after the installation, adjust by moving the dam farther away from the center drain valve.



**Important Note: Check the dam regularly for slippage.**

# USING DYE TABLETS

Try this simple test to find out if your toilet has a water-wasting leak.

- Step 1:** Add a crushed dye tablet to the toilet tank (not the bowl) and allow to dissolve. If you don't have dye tablets, try using a few drops of food coloring or 2 tablespoons of instant soft drink mix (the grape or cherry flavors work best).
- Step 2:** Wait ten to fifteen minutes.
- Step 3:** If you see colored water in the toilet bowl, you have a leak. This could mean that your toilet has a damaged flapper valve. Your local hardware store, home center or a licensed plumber can give you advice on proper replacement.



## WATER EFFICIENT SHOWERHEADS

On average, older, conventional showerheads use between five and seven gallons of water per minute. A ten-minute shower would use about 50-70 gallons per shower. That's a lot of water.

Water efficient showerheads use a maximum of 2.5 gallons per minute. Even if you do not reduce your time in the shower, an efficient showerhead can save an average of 25-45 gallons per shower. Taking shorter showers will save even more.



### Installation is Easy!

- Step 1:** You'll need two pairs of pliers – one to hold the shower arm in place and the other to remove the old showerhead. Placing a soft cloth between your pliers and the showerhead, turn the showerhead counter-clockwise to remove it.
- Step 2:** Clean the threads on the neck of the exposed pipe, then screw the showerhead on clockwise and tighten firmly.
- Step 3:** To provide a better seal in the event of a leak, wrap Teflon tape (available at hardware stores and home centers) around the neck threads 2 or 3 times before screwing on the new showerhead.

# FAUCET AERATORS

## Little Effort, Big Savings

Faucets can use 2 to 7 gallons of water per minute. Faucet aerators can reduce water flow to 1.5-2.5 gallons per minute. If your water looks cloudy or milky (mixed with air) as it comes out of the faucet, you may already have an efficient aerator.

### Installation:

Most faucet aerators install in seconds.

**Step 1:** Unscrew the existing aerator from your kitchen and bathroom faucets using your hand or a pair of pliers.

**Step 1:** Replace it with the new, low-flow aerator and tighten by hand. If your faucet is unthreaded, look for a “universal” faucet adapter at a local plumbing supply or home center.



**Important Note:** Periodically remove the aerator to clean out any particles that may have collected on the screen.



## What difference does saving a few gallons make?

It makes a big difference. The Earth has a limited supply of water and it's easy to use more than necessary. Just one dripping faucet or leaking toilet could dramatically increase the amount of water you use.

Installing water efficient plumbing fixtures, repairing household leaks, adopting water-saving habits and replacing that old, worn out toilet with a new, efficient 1.6 gallon model will save precious gallons of water every day.



### For more information about water conservation,

- **Call** our Water Conservation Hotline: (617) 242-SAVE
- **Visit** our Website: [WWW.MWRA.COM](http://WWW.MWRA.COM)
- **Write** to us: MWRA, Attn.: Community Support Program, Charlestown Navy Yard, 100 First Avenue, Boston, MA 02129