The main points of water use inside commercial buildings are toilets, urinals, faucets, showers and leaks associated with plumbing for these fixtures. Today's high efficiency fixtures reduce water use without reducing reliability or the user experience. Upgrading is an easy, low-investment strategy to achieve consistent water savings year after year.

With new plumbing technology continually coming on the market, we recommend reviewing your building fixtures every two years to see if an upgrade is available. The U.S. Department of Energy estimates that **up to 60 percent** of the total water use in commercial buildings comes from plumbing fixtures.

# RECOMMENDATIONS

#### PREMIUM HIGH EFFICIENCY TOILETS

Save 11,000 – 24,000 gallons per year per toilet by upgrading your fixtures

#### WHAT DO YOU HAVE?

Toilets use anywhere from 1.6 to 5 gallons per flush (gpf). If your toilets were manufactured between 1992-2010, they likely use 1.6 gpf. Toilets made after 2010 use 1.28 gpf or less. Look for a stamp listing the gpf near the toilet seat hinge or the underside of the tank lid or back wall for a date stamp.

#### WHAT'S NEW?

A new model can use as little as 0.8 gpf for tank-type toilets and 1.1 gpf for flush valve models. We recommend checking out performance reviews, flush ratings and efficiency grades posted by the industry testing group MaP Maximum Performance at **map-testing.com** and choosing a model that is certified under EPA's WaterSense Program, **epa.gov/watersense/commercial-toilets**.

Price Range (Product & Installation)	Available Incentives	Savings and Payback
Tank Type = \$250 - \$350 Valve Type = \$400 - \$600	\$250 per fixture Premium 1.1 gpf or less fixtures Apply at <b>socalwatersmart.com</b>	Tank Type = zero - six months  Valve Type = one - three years

**Considerations:** Make sure you measure for floor footprint, mounting heights and ADA requirements when preparing for replacements. Debris can settle and accumulate in pipes so it is recommended to flush lines prior to fixture replacements. For commercial buildings, limited augmented wastewater from showers, baths and washers may impact performance. Therefore it's important to pilot any new plumbing technology. To achieve optimal performance replace both the porcelain and the valve.

## **UPGRADE & SAVE**

WATER SAVINGS OPPORTUNITIES FOR YOUR
BUILDING'S PLUMBING

### **ZERO TO ULTRA LOW WATER URINALS**

Typical office buildings can save 26,000 gallons per urinal per year with upgraded urinals.

#### WHAT DO YOU HAVE?

Depending on your urinals age, you could save between 0.5 and 4.5 gallons per flush without sacrificing performance. Older urinals sold before 1992 can use up to 5 gallons per flush. Urinals manufactured between 1992-2014 were required to use no more than 1 gpf and those built after 2014 are required to be 0.5 gpf or less.

#### WHAT'S NEW?

Current code requires newly installed urinals to use 0.125 gpf or less. The EPA WaterSense Program has certified and listed urinals with proven performance and water efficiency at **epa.gov/watersense/urinals**. We recommend choosing any from this list that are 0.125 gpf or less.

Price Range (Product & Installation)	Available Incentives	Savings and Payback
\$600 - \$900	\$500 per fixture   0 – 0.125 gpf or less fixtures Apply at <b>socalwatersmart.com</b>	Immediate – three years

**Considerations:** Make sure you measure for floor footprint, mounting heights and ADA requirements when preparing for replacements. Debris can settle and accumulate in pipes so it is recommended to flush lines prior to fixture replacements. For commercial buildings, limited augmented wastewater from showers, baths and washers may impact performance. Therefore it's important to pilot any new plumbing technology. To achieve optimal performance replace both the porcelain and the valve.

## **LOW FLOW FAUCETS OR AERATORS**

Reduce a standard faucet flow by 30 percent without sacrificing performance or washing experience

#### WHAT DO YOU HAVE?

Old faucets use a significant amount of water that can easily be reduced without impacting water pressure, performance or user experience. If your faucet was installed before 1992, it likely uses 3-7 gallons per minute (gpm). Faucets built after 1992 typically use 2.5 gpm and those made after 2016 are required to flow no more than 1.2 gpm.

#### WHAT'S NEW?

If you have pre-2016 faucets, you can reduce water use by upgrading to low flow faucets or retrofitting your existing faucet with an aerator. Aerators are easy to install and can be screwed onto most faucet heads. They reduce water use by restricting flow and mixing air with the water. Because the water pressure is maintained, most people cannot tell that water flow has been decreased. Aerators are available for free from LADWP and a list of low flow faucets certified under EPA's WaterSense Program is available online, **epa.gov/watersense/bathroom-faucets**. Choose a faucet that meets the CA guidelines: 0.5 gpm for commercial fixtures and 1.2 gpm for residential fixtures.

Price Range (Product & Installation)	Available Incentives	Savings and Payback
Aerators - \$5 - \$15 Faucets - \$100+	Free aerators available from LADWP. Call 800-544-4498, press '5' and arrange for delivery or pick-up. Multi-family customers can enroll in the LADWP/SoCalGas Direct Therms program and receive free installation or aerators.	Immediate – three years

Considerations: There are faucets and aerators in the market today that use below current code of 0.5 gpm, however further reduction can lead to customer satisfaction issues. The highest efficiency products should be pilot tested prior to full implementation.

#### LOW FLOW SHOWER HEADS

Replacing a typical shower head can reduce water use by 25 percent or more.

#### WHAT DO YOU HAVE?

#### WHAT'S NEW?

The amount of water your shower head uses will depend on its type. But the typical shower head uses 2.5 gallons of water per minute.

There are a variety of new shower heads that use less water but still provide the same water coverage and spray intensity as standard shower heads. Shower heads that have earned an EPA WaterSense label have been certified to provide an equal or better shower experience at 2 gpm or less. Check out the approved shower heads at epa.gov/watersense/showerheads.

Price Range (Product & Installation)	Available Incentives	Savings and Payback
\$15 - 25	Free shower heads available from LADWP. Call 800-544-4498, press '5' and arrange for delivery or pick-up. Multi-family customers can enroll in the LADWP/ SoCalGas Direct Therms program and receive free installation or aerators.	Immediate – one year

Considerations: California recently enacted code that as of July 1, 2018, all showerheads bought or sold in California must be 1.8 gpm. It is recommended to test different models with the lower flow rates.