

# Toilet Replacement Payback Calculation

## Step 1. Calculate Your Combined Water & Sewer Rate

How are you billed?

or

Billed per thousand gallons (kgal)

water rate

+

sewer rate

=

combined water & sewer  \$/1000gal

Billed per hundreds of cubic feet (HCF)

water rate

+

sewer rate

=

combined water & sewer  \$/100 ft<sup>3</sup>

## Step 2. Calculate Your Expected Annual Water and Cost Savings

# of people in household

multiply by X 9.7 gallons/person/day

=

multiply by X 365 days/year

annual water savings =

divide by / 1000

multiply by water X  
& sewer rate  (from above)

=

annual cost savings

# of people in household

multiply by X 1.3 ft<sup>3</sup>/person/day

=

multiply by X 365 days/year

annual water savings =

divide by / 100

multiply by water X  
& sewer rate  (from above)

=

annual cost savings

## Step 3. Calculate The Cost of Replacing All Your Old (pre-1994) Toilets and Payback Period

Estimate the cost of a new toilet & installation. You can use a suggested toilet cost of \$75-\$150.

If you use a plumber add \$120 for installation

# of toilets to replace

X

cost of toilet & install

-

any rebates received

=

total installed cost

/

annual cost savings  (from above)

=

payback period\*  years

# of toilets to replace

X

cost of toilet & install

-

any rebates received

=

total installed cost

/

annual cost savings  (from above)

=

payback period\*  years



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\* Assumptions used: replacement of a 3.6 gpf toilet with a 1.6 gpf toilet creating a water savings of 9.7 gallons/person/day or 1.3 ft<sup>3</sup>/person/day