

Projected Savings from Showerhead Retrofit

Showerhead retrofit inputs and assumptions:

Average household size:	4.67	people ¹
Average number of full bathrooms per home:	2.04	full bathrooms per home ¹
% of water heated by gas:	37.28%	¹
% of water heated by electricity:	46.52%	¹
Installation / participation rate of:	45.74%	¹
Average Showerhead has a flow rate of:	2.50	gallons per minute ²
Retrofit Showerhead has flow rate of:	1.75	gallons per minute ³
Number of participants:	1,202	¹
Shower duration:	8.20	minutes per day ²
Showers per day per person:	0.67	showers per day ²
Product life:	10.00	years ³

Projected Water Savings:

Showerhead retrofit projects an annual reduction of:	1,892,698	gallons ⁴
Showerhead retrofit projects a lifetime reduction of:	18,926,982	gallons ⁵

Projected Electricity Savings:

Showerhead retrofit projects an annual reduction of:	115,684	kWh ^{2,6}
Showerhead retrofit projects a lifetime reduction of:	1,156,840	kWh ^{2,7}

Projected Natural Gas Savings:

Showerhead retrofit projects an annual reduction of:	4,635	therms ^{2,8}
Showerhead retrofit projects a lifetime reduction of:	46,354	therms ^{2,9}

¹ Data Reported by Program Participants.

² (March 4, 2010). EPA WaterSense® Specification for Showerheads Supporting Statement. Retrieved from http://www.epa.gov/WaterSense/docs/showerheads_finalsupstat508.pdf

³ Provided by manufacturer.

⁴ [(Average Household Size x Shower Duration x Showers per Day per Person) ÷ Average Number of Full Bathrooms per Home] x (Average Showerhead Flow Rate - Retrofit Showerhead Flow Rate) x Number of Participants x Installation Rate x 365 days

⁵ [(Average Household Size x Shower Duration x Showers per Day per Person) ÷ Average Number of Full Bathrooms per Home] x (Average Showerhead Flow Rate - Retrofit Showerhead Flow Rate) x Number of Participants x Installation Rate x 365 days x Product Life

⁶ Projected Annual Water Savings x Percent of Water that is Hot Water x 0.18 kWh/gal x % of Water Heated by Electricity

⁷ Projected Annual Water Savings x Percent of Water that is Hot Water x 0.18 kWh/gal x % of Water Heated by Electricity x Product Life

⁸ Projected Annual Water Savings x Percent of Water that is Hot Water x 0.009 Therms/gal x % of Water Heated by Natural Gas

⁹ Projected Annual Water Savings x Percent of Water that is Hot Water x 0.009 Therms/gal x % of Water Heated by Natural Gas x Product Life