



Saving Water Quickly Through Legacy Product Replacement



Legacy product replacement saves a high volume of water quickly

A new Plumbing Manufacturers International (PMI)-commissioned study of the market penetration of mandated water-efficient fixtures in California finds a continuing and strong need to replace older plumbing fixtures, known as legacy products, with new ones. Installing water-efficient plumbing products quickly takes on increased urgency as we seek solutions to water shortages caused by the continuing drought.

Conducted by GMP Research, the California Market Penetration of Water-Efficient Plumbing Products Study finds the residential market penetration of water-efficient 1.28 gallons per flush (gpf)-or-less toilets to range from 22.0% to 25.9% in the five state regions surveyed (Exhibit 1). The market penetration in disadvantaged communities was even lower, ranging from 19.6% to 22.2% in the five regions (Exhibit 2).

PMI encourages public-private partnerships to replace inefficient toilets and save water in California

The study supports the idea that the direct replacement of older, inefficient toilets and other fixtures can save a high volume of water quickly. Should California do a toilet replacement program focused on disadvantaged communities, 3.2 billion gallons of water can be saved in three to five years by replacing 469,000 3.5+ gpf toilets currently in use with water-efficient 1.28 gpf toilets (Exhibit 2). Statewide, up to 326 billion gallons of water can be saved over 30 years by replacing 26.1 million 1.6+ gpf toilets with 1.28 gpf toilets (Exhibit 1). By accelerating the replacement of these toilets, 65.3 billion gallons can be saved within five years (Exhibit 3), and 95.7 billion gallons within 10 years (Exhibit 4).

Toilets offer the greatest opportunity for water savings within a home. For this reason, PMI encourages public-private partnerships and incentives to replace inefficient toilets as a response to water shortages caused by climate change, population growth, and continued residential and commercial development.

UP TO 326 BILLION GALLONS OF WATER

Can be saved by replacing 26 million 1.6+ gpf toilets



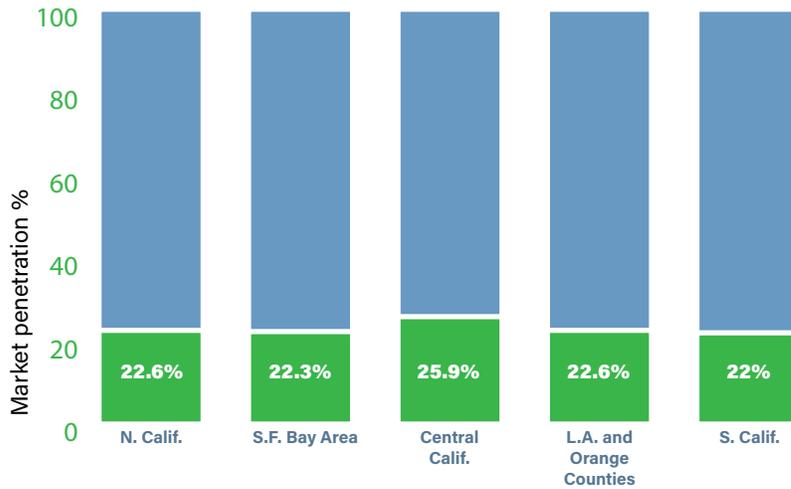
Opportunity for water savings

23% market penetration of 1.28 gpf-or-less toilets

3 Benefits of Legacy Product Replacement in California

1. High volumes of water can be saved statewide

Exhibit 1



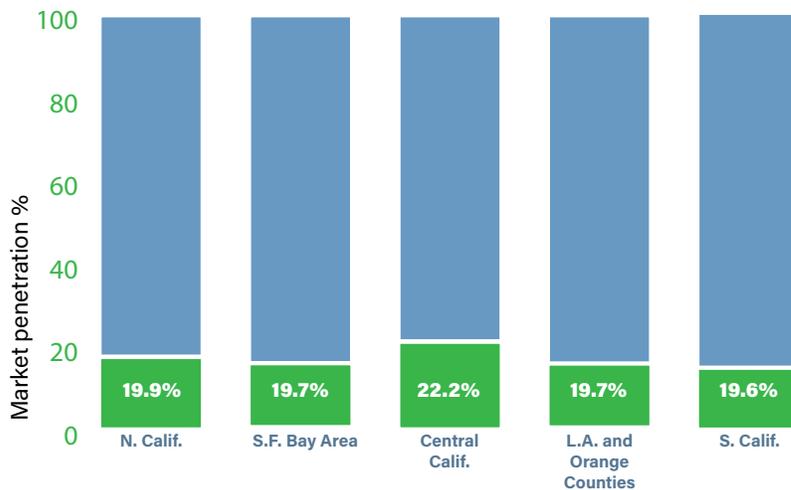
Opportunity to Save 326 Billion Gallons

Market Penetration %

Water-Saving Opportunity

2. Toilet replacement saves water quickly in disadvantaged communities

Exhibit 2



Opportunity to Save 3.2 Billion Gallons

Market Penetration %

Water-Saving Opportunity

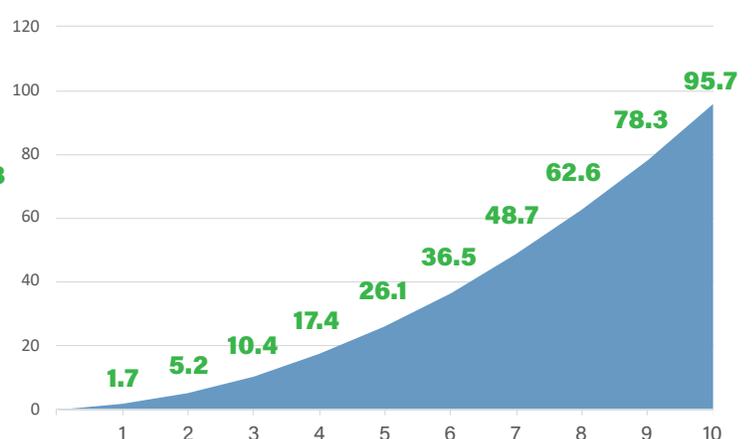
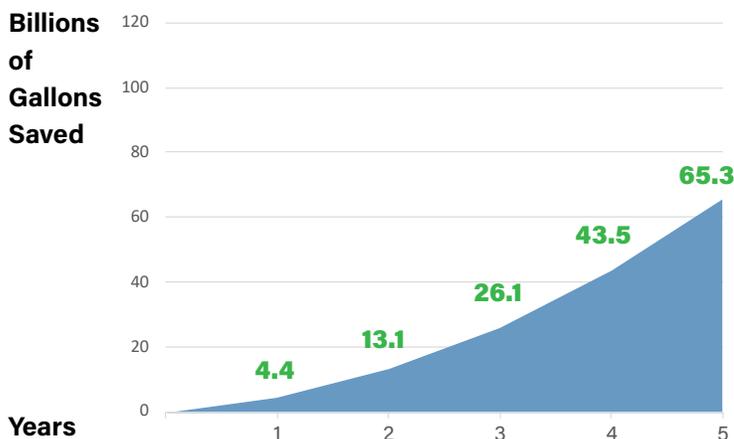
3. Accelerated toilet replacement saves water faster throughout California

Exhibit 3

65.3B Gallons Saved If Replaced in 5 Years

Exhibit 4

95.7B Gallons Saved if Replaced in 10 Years



Toilet replacement programs have been successful throughout the nation, but more needs to be done

Water-efficiency grant programs continue to be developed by federal, state and local governmental entities, especially as drought persists and water resources recede. These programs cover both product and installation costs.

In California, toilet replacement or rebate programs have been implemented in Los Angeles, Long Beach, San Francisco, and other municipalities.

San Antonio, Texas, had a decade-long program that delivered and replaced toilets free of charge until virtually no inefficient toilets were left to replace. Programs replacing toilets free of charge or via rebates have been implemented throughout the nation, primarily at the county or municipal level, in places including Dallas/Fort Worth, Maui, New York City, Seattle, and Tucson.

Replacing inefficient faucets and showerheads can save even more water

The GMP study also examined the market penetration of water-efficient kitchen faucets, bathroom faucets and showerheads in residential buildings, as well as the market penetration of water-efficient tank-based toilets, toilets with flushometer valves, urinals, faucets and showerheads in commercial settings. Significant water savings can be achieved in residential and commercial settings by replacing older fixtures in these categories with water-efficient fixtures, as well.

While market penetration for water-efficient faucets, showerheads, urinals and other fixtures is higher than it is for toilets, even more water can be saved by replacing those that do not meet standards mandated in California. Water utilities, home improvement retailers, and government entities have often offered rebates or giveaways to replace these less-expensive products.

About Plumbing Manufacturers International

Plumbing Manufacturers International (PMI) members produce more than 90% of the toilets, showerheads, faucets and urinals used in America. More than 37,000 toilet, showerhead, faucet and urinal products have become WaterSense-certified as meeting high performance standards while being at least 20% more water-efficient than standard products.

Developing safe, reliable and innovative water-efficient plumbing technologies, PMI members contribute more than 464,000 jobs and \$85.5 billion in economic impact to America's economy. With a vision of safe, responsible plumbing – always, PMI advocates for plumbing product performance contributing to water efficiency and savings, sustainability, public health and safety, and consumer satisfaction.



Legacy product replacement is a project of PMI's Rethink Water initiative, an effort to ensure that future generations have reliable access to clean and safe water. Rethink Water addresses the effects of climate change and aging water infrastructure by building a coalition sharing a vision of sustainably managed water.



Safe, responsible plumbing. Always.

Plumbing Manufacturers International

1750 Tysons Blvd., Ste. 1500

McLean, VA 22102

Tel: 847-481-5500 safeplumbing.org

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