

---

# THE WATER SAVING BENEFITS OF COMMON AREA LAUNDRY ROOMS

A White Paper Prepared for  
Municipalities and Utility Water Professionals

---



1700 Kylie Drive, Suite 100, Longmont, CO 80501  
Tel: 800.380.3652, [www.laundrywise.com](http://www.laundrywise.com)

## Scope of This Document

This document provides an introduction to the benefits of common area laundry rooms. It presents the basic concepts, highlights the advantages and provides information on developing common area laundry rooms. Whether you are a city planner, water engineer or utility manager, this document can help you.

## A Brief Background

Water usage varies. On average, daily indoor water use per capita in America is about 56 gallons for a two adult household. Forty-five percent of this figure is dedicated to bathroom use, while 21.5 percent is for laundry purposes. <sup>(1)</sup>

It's a simple fact. As the population increases, the demand for water rises. Growing industrial needs compound this problem. Unfortunately, the supply of water is a finite resource and, more and more, cities are discovering that they must take action now to plan for their future water needs. Otherwise, many cities will face the hard realities of severe drought, dried-up rivers, poor water quality, groundwater depletion, escalating infrastructure costs and diminishing alternatives.

Ask any city engineer responsible for procuring water what the most cost-efficient method for solving this problem is. Most, without blinking an eye, will tell you "conservation."

For years, cities have encouraged the conservation of water through a variety of methods including building codes and regulations, incentive programs and public education. Builders and developers are required to utilize low-flow showerheads, faucet aerators and low-flush toilets, and encouraged to conserve water in outdoor landscaping by installing automatic sprinklers and by xeriscaping.

While these methods take care of some water usage, what about the 21.5 percent of water that is used for washing machines? Many municipalities and utility companies across the U.S. are already taking action to encourage water savings in laundry appliances in single-family residences. However, an often-overlooked method of conservation, which can be applied to a large sector, is common area laundry rooms in multi-housing properties.

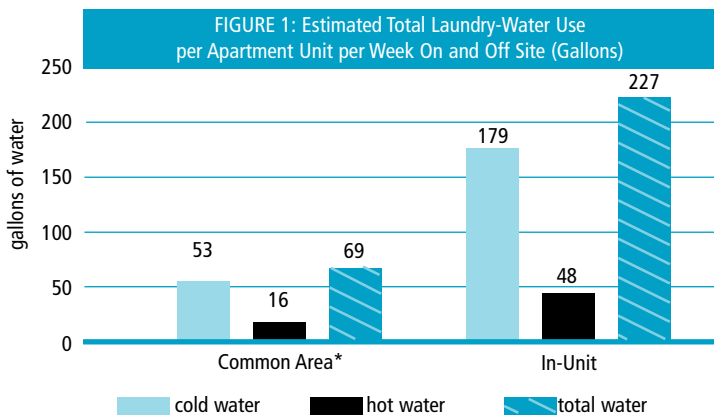
## A Comparison of In-Unit Connections and Common Area Laundry Rooms

According to a 2002 water-usage survey by an independent marketing research firm, washing machines located in apartment rental units are a major drain on natural resources.

From September to December 2000, laundry-water use was calculated using water meters attached to 191 in-unit washing machines and 50 common area washing machines in eight apartment properties matched for quality and size in four cities across the U.S.

In a head-to-head comparison of washing machine usage rates in apartment units versus that of coin-operated machines in common area laundry rooms, the study found that each in-unit washer used an average of 11,804 gallons of water annually. Coin-operated machines in the common area laundry rooms, on the other hand, averaged water usage of only 3,588 gallons a year per apartment unit served.

That figure amounts to 8,216 excess gallons of water required per in-unit machine per year. In total, residents with in-unit washers used 3.3 times more water for their laundry than their counterparts in buildings with common area laundries.



\* Differences between laundry-water use in common area versus in-unit properties were statistically significant  $p < 0.05$ .

**FIGURE 2: Estimated Total Laundry-Water Use per Apartment Unit per Week On and Off Site (Gallons)**

Meter Type	Type of Laundry Facilities*		
	Common Area	In-Unit	Ratio of In-Unit to Common Area
Cold Water	52.91	179.53	
Hot Water	16.22	47.58	
TOTAL	69.13	227.11	3.3 times higher

\* Differences between laundry-water use in common area versus in-unit properties were statistically significant  $p < 0.05$ .

Residents with in-unit washers tend to operate the equipment far more often and less efficiently, say researchers, in explaining the water savings realized through the use of common area laundry rooms.

**FIGURE 3: Total Laundry Loads per Week**

Number of Loads	Type of Laundry Facilities	
	Common Area	In-Unit
0	2%	0%
1	11%	9%
2	28%	13%
3	22%	13%
4	19%	14%
5	6%	14%
6	6%	14%
7*	6%	23%
TOTAL	100%	100%
Average Loads	3.32	5.08

\* Differences between respondents from common area versus in-unit properties were statistically significant  $p < 0.05$ .

## Conservation Potential of Common Area Laundry Rooms

In 2001, the U.S. Census Bureau completed an “American Housing Survey for the United States” to learn more about rental housing. Included in the survey were questions about amenities available to residents. The following table details their findings as they pertain to common area laundry rooms and in-unit connections.

FIGURE 4: Characteristics of Rental Apartment Units, 2001 (Thousands)

	All Apartment Units
Total	15,936
With Washing Machine	4,130
With Dryer	3,670

\* Source: NMHC tabulations of the U.S. Census Bureau’s 2001 American Housing Survey.

Based on the above figures, more than 33 billion gallons of water could potentially be wasted across the U.S. in apartments with in-unit washing machines – in just one year!

With in-apartment laundry equipment, water isn’t the only resource being wasted. There’s also the attendant gas and electricity as well as massive amounts of extra sewage generated by less efficient in-unit washers. Encouraging the use of common area laundry rooms in apartment complexes is an easy, yet significant way to preserve resources without creating an insurmountable hardship for residents.

FIGURE 5: Estimated Energy Use per Apartment Unit per Year On and Off Site

	Type of Laundry Facilities		
	Common Area	In-Unit	Ratio of In-Unit to Common Area
Electricity Consumption	117.71 kWh	580.71 kWh	4.9 times higher
Gas Consumption	5.54 therms	28.91 therms	5.2 times higher

## Common Area Laundry Rooms as an Amenity

A common misperception is that apartment managers and owners believe their residents prefer in-unit connections. In reality, well maintained, affordably priced, convenient laundry rooms make apartment complexes more desirable to residents than complexes that lack common area laundry rooms but provide laundry connections inside the apartment units. And, there are many benefits common area laundry rooms impart when residents utilize them rather than in-apartment equipment. For these reasons, many managers are considering additions or enhancements to common area laundry rooms as a way to improve the property they manage.

## Cost Savings of Common Area Laundry Rooms

Not only do common area laundry rooms relieve managers’ concerns about noise or potential damages resulting from in-apartment laundry machines, but in-unit connections simply cannot justify their expense. They take up valuable floor space, require more plumbing, venting and electrical wiring so construction costs are greater and they create higher utility costs.

Additionally, the cost of installing in-unit equipment in every apartment in a complex is far more than the cost of equipment in common area laundry rooms. In general, only one washer/dryer will be required:

- Per 8-12 units in low-to-middle-cost, family dominated buildings.
- Per 10-15 units if serving mostly younger working adults.
- Per 15-20 units if serving mostly older working adults or luxury complexes.
- Per 25-40 units if serving senior citizens.

## Implementing Water Saving Programs

Many cities across the U.S. have begun water programs that offer incentives and rebates for the use of water efficient laundry equipment. Currently, most actions that have been taken only apply to single-family residences. It would be very appropriate to expand these efforts to encourage the utilization of common area laundry rooms in multifamily properties.

Encouraging the utilization of common area laundry rooms throughout a municipality, county or state can take place in many ways, including incentives and rebates. Here are just a few suggestions:

- Many municipalities already have guidelines in place requiring the utilization of low-flow showerheads, faucet aerators and low-flush toilets, and encouraging the use of xeriscaping in outdoor landscaping in multifamily properties. It would be a simple task to add the use of common area laundry rooms in these properties. Properties in compliance could receive a rebate or incentive on a sliding scale based on how many of the items they utilize.
- Property owners who demonstrate that they have common area laundry rooms would receive discounted rates for water, sewer, gas and electricity.
- New properties that include in-unit connections and/or exclude common area laundry rooms could be penalized in the form of higher building permit fees.

Common area laundry rooms actually lower the construction cost of building new apartment buildings. In addition, they decrease the cost of operating multifamily properties. These savings could be passed on to residents in the form of lower rent or increase the property's profitability.

## An Example

In Denver, Colorado, multifamily complexes account for 14 percent of water used in their service area. For 2002, this amounted to 10.9 billion gallons of water. Ten percent of that total can be attributed to laundry usage. The city has a plan in place that targets multifamily properties.

"Based on our experience, it is much more economical to have common area laundry rooms," stated Denver Water's Manager of Water Conservation, Elizabeth Gardener. "Tenants save money because they are not buying or renting their own machines. They have lower water and wastewater charges because they usually wash fewer loads of clothes."

"In addition," continues Gardener, "Tenants see a reduction in rent and monthly fees because of reduced maintenance costs."

## Conclusion

By promoting the inclusion of laundry rooms in multifamily properties, as well as the use of efficient technologies that reduce water and energy use, communities across the U.S. can save money and help the environment without sacrificing quality of service. Utility managers, working with city planners, engineers and other decision-makers, can assist with the implementation of efficiency programs in their own service area.

<sup>1</sup> U.S. Department of Housing and Urban Development, Office of Policy Development and Research. *Overview of Retrofit Strategies: A Guide for Apartment Owners and Managers*, May 2002. p3.

## About Laundrywise

Laundrywise is a division of the Multi-Housing Laundry Association (MLA), and is dedicated to increasing awareness about the conservation benefits of common area laundry rooms in multifamily properties.

The MLA is a North American trade association of laundry service providers, manufacturers and affiliated companies dedicated to making multi-housing laundry service an attractive, profitable and responsible alternative for multi-housing property owners and managers.

For more information about Laundrywise or the MLA please call 800.380.3652, or visit [www.laundrywise.com](http://www.laundrywise.com).