



Owning and Operating a Water Efficient Professional Car Wash



Owning and operating a car wash can be expensive, even when the initial start-up price has been taken care of. You can reduce your business' monthly utility bills by using efficient water-reducing practices and technologies.

Here are a few ways to make your car wash operation as efficient and Arizona-friendly as possible.

For More Water Conservation Information:

www.azwater.gov/conservation

Statewide Conservation Office
 (602) 771-8534

Phoenix AMA
 (602) 771-8585

Pinal AMA
 (520) 836-4857

Prescott AMA
 (928) 778-7202

Santa Cruz AMA
 (520) 761-1814

Tucson AMA
 (520) 770-3800

If you are starting up a new carwash business, or renovating your existing business, consider these facts:

Each gallon used gets paid for twice; once through the water bill and once through the sewer bill.

Choosing the right system for your business is one way you can significantly cut down on the cost of obtaining and disposing of water.

	Gallons of water per Vehicle	Evaporation & Carryout (%)
Self-serve	12.3	19.8
In-bay	72.5	32.8
Conveyor	43.8	16.7

A good way to cut down on the utility bill is to **install a water reuse system**. Not only does it save water and money, but many customers look for businesses that have water reuse equipment.

(Water Savings: 50% - 80%)

An easy way to indicate that your company reuses water is to post a sign.

Tips and Technologies for Self-Serve Car Wash Owners and Operators



Self-serve car washes use roughly **12 gallons per vehicle in desert regions**. Gallons lost to evaporation and carryout (water that is still on the vehicle at time of exit) equal about 20% of the water used.



Tips for Self-Service Car Wash Continued

- Choose **hand-held spray wands and foamy brushes** that use 3.5 gallons per minute or less. **(Water Savings: 50% - 80%)**
- Make sure each spray wand, foamy brush, or similar system **has a positive shutoff valve** so that the water will not run while the system is not being used.
- **Replace spray nozzles** regularly and **check for leaks**. Repair the leaks promptly as they occur.
- **Replace brass or plastic** nozzles, which tend to erode more quickly, with **stainless steel** nozzles.

Tips and Technologies for Conveyor Automatic Car Wash Owners and Operators

Automatic Conveyor carwashes use **44 gallons per vehicle** in desert regions and lose 17% of that to evaporation and carryout. These are recommended above In-Bay automatic car washes.

- For light trucks and small vehicles, select new rollover and conveyor equipment that uses **less than 3.5 gallons per minute**. For buses and large trucks use equipment that use less than **7.5 gallons per minute**.
(Water Savings: 50% - 80%)



Water Conservation Practices for In-bay Car Wash Owners and Operators



In-bay car washes rotate the washing equipment around a stationary vehicle, using roughly **72.5 gallons per vehicle**. They lose 33% of the water used due to evaporation and carryout.

This is the least efficient type of car wash and is NOT recommended. However, if you own or operate this type of carwash, it is recommended that the following water conservation practices are implemented:

- **Replace nozzles** regularly, **check for leaks** and **repair** them promptly.
- **Check the alignment** of the nozzles on a regular basis so the water does not spray on the wall.
- **Time the arches** precisely in the conveyor to come on as soon as the car arrives and to shut off right as it leaves the arch.
- Program a **dwel time** for water to run off the vehicle into the **reclaim pit** before allowing the vehicle to exit the conveyor.