



# Arizona Department of Water Resources

*Protecting Arizona's Water Supply for Its Next Century*

## Owning and Operating Water Efficient Car Wash:



Owning and operating a car wash can be expensive. You can reduce your business' 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.

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

**You pay TWICE for each gallon used! 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
Conveyor	43.8	16.7
In-bay	72.5	32.8

**Install a water reuse system** and cut down on the utility bill. Not only does it save water and money, but many customers look for businesses that have water reuse equipment. Post a sign that your car wash reuses water and promote your business as a water conservation leader! **(Water Savings: 50% - 80%)**

### Tips and Technologies for Self-Serve Car Wash

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

- 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 & Technologies for Automatic Conveyor Car Wash

Automatic Conveyor carwashes use 44 gallons per vehicle in desert regions and lose 17% of that to evaporation and carryout.

- 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

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 car wash, you are encouraged to implement the following water conservation practices to save water and money on your water bill:



- 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 dwell time for water to run off the vehicle into the reclaim pit before allowing the vehicle to exit the conveyor.

## For More Water Conservation Information

Visit our website: [www.azwater.gov/conservation](http://www.azwater.gov/conservation), or call: (602) 771-8585

*This fact sheet has been developed by the Arizona Department of Water Resources' Statewide Water Conservation Program in an effort to strengthen the culture of conservation throughout Arizona.*