



## City of Charlottesville Carwash Program

Working in partnership with the Albemarle County Service Authority, the Carwash Certification Program (CCP) is intended to promote and recognize water efficiency in local business.

### Certified Carwashes (last updated 2013)

#### Car Lovers, 2175 Ivy Road

| Car Lovers Carwash, 2175 Ivy Road |                   |
|-----------------------------------|-------------------|
| Potable Water Usage per Vehicle   |                   |
| Wash Name                         | Gallons (average) |
| Express                           | 15.4              |
| Ultimate                          | 25.73             |
| Premium                           | 27.65             |

#### Express Carwash, 995 Seminole Trail

| Potable Water Usage per Vehicle |                   |
|---------------------------------|-------------------|
| Wash Name                       |                   |
| Wash Name                       | Gallons (average) |
| Basic                           | 18.3              |
| Super                           | 24.7              |

*Please note that Express Carwash offers numerous wash options other than Basic and Super. These additional options do not impact the amount of water used but instead take manual detailing into account.*

### Qualifications for Certification: [Carwash Certification Program 2013](#)

## **Carwash Program FAQ's:**

### **Why does the certification measure potable water?**

Potable water is the water that is pulled from our community water supply, treated, and distributed through the underground pipes to homes and businesses. Using this as our metric for the program allows for easy, apples to apples comparison of different businesses and wash packages.

### **What's the most efficient type of carwash?**

Carwashes are generally placed into three different categories: self-serve, in-bay, or conveyor. All other things being equal (for instance, all the equipment is equally well maintained), a conveyor system will use the most, followed by an in-bay system. And any system that is "touchless" will generally use more water than one that uses friction (brushes touch your car). When any of these systems use a high percentage of recycled water in their wash cycle, this will improve the efficiency.

A self-serve carwash can be the most efficient. But because it is operated by individual customers, this can vary greatly. For instance, someone that keeps their wash within one cycle (no added quarters) and uses the high-pressure wand only briefly and the scrubber brush a lot, is going to use significantly less water than someone that keeps the high-pressure water going for a long time.

### **Isn't it a waste of water to wash my car?**

Car washing is not an essential use, such as for human health and sanitation. However, as with all discretionary uses of our natural resources, we must balance the pros and cons. For most of us, our cars are a significant financial investment. Regular washing is known to protect the finish on cars, which plays a role in getting many years of useful life out of that investment. There is also the aesthetic value, which is important to many people.

### **Should I only use a carwash that recycles water?**

Reusing water in the wash cycle is an important component of efficiency in carwashes. This is especially true for in-bay and conveyor systems. However, self-serve facilities rarely have a recycling component. This is because they are generally unmanned during business hours, and it is common for trash and engine fluids to be washed into the drain (such as from someone changing their oil in the wash bay, which, by the way, you should not be doing). The equipment necessary to sanitize such water for reuse is impractical and cost prohibitive. As pointed out earlier though, a conscientious customer at a self-serve facility could use less water than an automatic system at a full-service facility, so the amount of water reused is not a definitive measure for water conservation purposes.

### **Can't I just wash my car at home?**

Assuming we are not under drought restrictions, there is nothing prohibiting you from washing your vehicle at home. As with the self-serve style carwash, this can be either very efficient or very wasteful, depending on the care you use during the process. To use the least amount of

water possible, make sure your hose is fitted with a shut off nozzle (meaning the water stops flowing when you let go of the trigger) and there are no leaks. Use the hose sparingly and let elbow grease and a soapy sponge do most of the work.

Commercial carwashes do have one distinct environmental advantage over the home wash, and that is pollution control. When water flows over your car, it rinses off a variety of pollutants: small amounts of tar, oil, gas and heavy metals (from brake pads). In a commercial carwash, all this water will eventually be discharged to the sanitary sewer and treated by our wastewater treatment plant. If done in your driveway, it is likely that this water will run into the storm drains, which will carry it, untreated, to local streams. This is the case when your car is washed on any impermeable surface that does not direct to a wastewater drain, including parking lots. To reduce this polluted runoff, it is suggested that you wash your car over a grassy area; the soil and plant material can offer some filtration of the dirty water.

#### **Do other carwash certifications like this exist?**

Yes, the International Carwash Association has a WaterSavers program that includes a carwash certification process. Their standards are very similar to those used in our program. [You can learn more but visiting their website. San Antonio, Texas is one example of a city that has adapted this certification program for carwashes.](#)

**\*Please refer to the explanation below for carwashes that use a reverse osmosis system.**

Many carwashes use Reverse Osmosis (RO) or "spot free" water. This is water that has been pulled from the potable system and filtered to a high degree to eliminate spots on a newly washed car. The RO water is stored onsite in tanks and used in washed depending on which wash options are chosen by the user. The total amount of RO water pulled from the potable water system for each car can be difficult to measure, for two reasons. First, the RO tank does not refill after each individual carwash. Instead, when the volume of water in the RO tank is reduced to a certain level, it automatically starts to refill, regardless of whether a car is being washed at that time. For instance, if a particular wash option used 10 gallons of RO water, this water would not pass through the meter as the car was being washed, but would be pulled from the RO tank, which had pulled it through the meter earlier in the day. Second, there is a certain amount of "reject" water that does not pass muster after the RO process. This is stored separately and used with the recycled wash water in other processes (such as the underbody rinse). The amount of rejected RO varies with each cycle.

The Carwash Certification Program uses meter reading during a wash to determine the potable water used. So how can we account for this stored potable water? That depends on the exact set up at each carwash inspected. Below we detail the methods used for each wash. Though they may be different, the bottom line is that they obtain a fair, reasonable, and repeatable representation of how much water is used when you wash your car at that facility.

**Car Lovers Carwash:** The RO system is turned off before the wash begins. All of the water would have been pulled from the RO tank is instead pulled directly from the potable water system and passes through the meter where it can be measured on a per wash basis.

**Express Carwash:** No RO system in place at this carwash.

[Information about Albemarle County Service Authority Carwash Certification Program](#)

*Interested in the Carwash Certification Program? Please Contact the Water Efficiency Program Coordinator via email ([waterconservation@charlottesville.org](mailto:waterconservation@charlottesville.org)) or phone (434-970-3877)*