



# CREATING AN ECO-FRIENDLY CAR WASH

PHOTO COURTESY OF AWASH SYSTEMS CORP.

**When looking for a more sustainable way to wash cars, consider making modifications such as washing cars less frequently, cleaning cars off-site at a local car wash, or installing an on-site wash that regulates or recycles the water.**

**BY AMY WINTER-HERCHER**

**H**OW CAN CAR RENTAL OPERATORS SAVE WATER within the vehicle washing and rinsing process?

Washing with an automatic car wash is more water efficient than washing by hand. If you use the hose to wash a car, the hose releases 11 gallons of water per minute, according to Jack Johnson, president of Awash Systems Corp.

As cities are getting stricter with water conservation, some rental operators are being forced to cut their water usage and re-evaluate their car-washing method, including assessing more water friendly containment or recycling systems.

Here are some ideas for developing an eco-friendly car wash to reduce water usage, comply with water conservation programs, and ultimately save money on the water bill.

## **AUTOMATIC WASHES**

Types of automatic car washes include

a rollover or in-bay (the car is stationary while the wash equipment moves over the car), the drive-through (a curtain or top wheel to clean horizontal surfaces and two side brushes to clean the front, rear, and vertical surfaces), and a conveyORIZED tunnel (the conveyor pulls a car through the wash equipment).

Rental operators can choose from touch-free cleaning and friction-cleaning equipment, but touch-free cleaning utilizes four times more water than friction-cleaning equipment, says Kevin Collette, vice president of sales for Sonny's CarWash Factory, an automatic car-wash manufacturer.

When using touch technology, the brushes do the cleaning, requiring less soap and water during the washing process.

Awash Systems Corp. offers an automatic car wash that takes up less space. According to Jackson, it's a "portable car wash on wheels."

"Our system fits the niche that doesn't

have room for a large automatic car wash," says Jackson. "You don't need a specific spot for a car wash; you can put our portable wash inside your facility or hook it up outside."

Using the portable system, car washers walk the spinning brush around the vehicle, apply soap, and then rinse with water. Hooked up to a water hose, the system automatically disposes a set amount of water. For a single car, the system uses 1 gallon of water to wash and two gallons of water to rinse, according to Jackson.

## **WATER RESTRICTIONS**

When setting up a car wash, car rental facilities need a water containment system. The federal Clean Water Act sets water quality standards for contaminants in surface waters. It is illegal to release any type of pollutant into navigable waters, including soap and dirty water from car washes.

## SUSTAINABILITY

With some states — like California — experiencing severe droughts, water usage standards have become even stricter.

The city of Beverly Hills enacted an ordinance to cut water usage by 30%. “I went to a city meeting and was told that car rental companies couldn’t use water to wash cars anymore unless we had a recycling water system,” says Sam Zaman of Black and White Car Rental, an exotic rental company.

In the end, Zaman purchased a \$30,000 filtration system that recycles the water. So far, the system has cut his company’s water usage about 30% to 40%, he says.

### USING RECLAIMED WATER

As more towns and municipalities call for water reduction, water recycling systems — similar to the one Zaman purchased — are becoming more popular among car rental companies.

Geomat’s containment mat collects a car wash’s water for reuse. The system captures waste-water runoff, filters it, and then either pumps it back into the system for reuse (closed loop) or sends it to the city’s sanitary sewer line.

The reclaimed water lasts about eight to 10 weeks for a typical car rental company, according to Al DeChard, president of Geomat. The car pulls up on top of the Geomat unit to get washed. After collected in the mat, the water flows into a series of filters and fills up a holding tank. After it flows into another tank, it’s mixed with some fresh water. It then goes

## CAR WASHES AT CONRACS



PHOTO COURTESY OF CONRAC SOLUTIONS

**M**atthew Fairbanks, president of Conrac Solutions, which manages several on-airport consolidated car rental facilities, shares how his company has lowered water usage at some of its consolidated facilities’ car washes:

We are proactive about maintaining the brushes, the motors, and the pumps that allow the car wash to run more effectively.

We spend time tracking and managing data related to car washes. This can help us understand where the problems are and where we can make cuts.

We look for modifications we can make to the car-wash systems. To save water at San Francisco International Airport’s conrac, we replaced nozzles with low-flow fixtures and turned off a water archway in the car wash. We also turned off the reverse osmosis system; it makes for a better car wash by leaving fewer water spots but it uses more water.

At Seattle-Tacoma International Airport’s conrac, we are starting a water reclamation project. We are engineering a system to recapture rainwater and use it in the car washes.

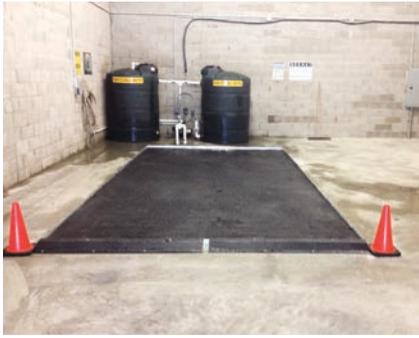


PHOTO COURTESY OF GEOMAT

The Geomat system captures wastewater runoff, filters it, and then pumps it back into the system for reuse.

through a pump to be reused for washing cars.

“About 15% of our clients are looking into this system to save money on their water bills,” says DeChard.

Developed by New Wave Industries, the PurWater Water Recovery System also captures car-wash water and puts it through a filtration system. Most of the process occurs underground through a series of tanks. As the water settles into the first tank, the solids in the water drop to the bottom of the tank, allowing the water to flow into the next tank. Once the water reaches the third



PHOTO COURTESY OF SCOTT NEAL

Rent-A-Wreck Operator Scott Neal has partnered with a local car wash to pay \$12 a month per car for unlimited washes, which he provides customers as an added bonus.

tank, it has gotten progressively cleaner, according to Gary Hirsh, president of New Wave Industries.

When a car enters the wash system, it will signal the system to draw water from the last tank for a final filtration. “The PurWater system can use about 75% of reclaimed water to wash the vehicles,” says Hirsh.

#### OFF-SITE SOLUTIONS

Scott Neal, a Rent-A-Wreck operator in

Phoenix, can't wash his cars on-site at the rental facility. He has partnered with a local car wash company to get his cars washed.

Currently, Neal pays the car wash a monthly rate of \$12 per car for unlimited washes. “The price for the car wash is part of the customer's \$6 maintenance fee, which also includes replacement of oil and other fluids to upkeep the car,” says Neal.

During the rental, Neal allows and promotes customers to drive through the off-site car wash as many times as they want. After the rental, each customer receives a free car-wash coupon to take their personal vehicle. It's a win-win: Neal gets his rental cars returned clean and the car wash company has access to more potential customers.

In severe drought areas, some rental companies decided to turn off their on-site car washes, according to Matthew Fairbanks, president of Conrac Solutions, an operator of consolidated airport facilities. “The company would leave a note saying, ‘we are in a drought and didn't wash your car. Here is a credit of \$5 off the rental price.’”

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