

Appendix E:

Suggested Best Management Practices for Commercial Car Washers

The amount of water used by carwash facilities varies with the type of facility, the cleaning system used, and the utilization of water reclamation and recycling processes. And while recycling can greatly reduce the volume of M&I water used, there are many other ways in which carwash facilities can save water.

All Carwash Facilities

- Maintain all water devices and equipment to original or improved specifications at all times
- Modify existing carwashes to recycle as much water as possible by installing filters, storage tanks, and high-pressure pumping systems
- Limit the number of spray nozzles and set flow rates at the minimum volume and pressure required
- Take advantage of gravity; place bigger nozzles on top and smaller nozzles on the sides
- Replace all nozzles annually
- Install automatic shutoff valves or preset timers on faucets and hoses
- Increase conveyor speed to reduce rinse cycles to no more than 40 seconds per vehicle
- Minimize dripping by replacing or maintaining positive-cutoff solenoid valves at all control points for prewash, wash, hot wax, and rinse
- Conduct regular checks for leakage and maintenance of all water-using equipment
- Install positive shut-off valves on all wringer sinks
- Sweep out bays before washing them; use high-pressure wands instead of hoses
- Avoid using water to wash impervious surfaces; broom or use high-pressure, low-volume water systems
- Install water-efficient faucets and toilets

In addition to implementing the above practices, utilize the following for specific facilities

Self-serve

- Set a maximum flow of 3.5 gallons per nozzle
- Turn off spot-free rinse or recycle reject water
- Install a weep management system
- Install automatic shutoff valves on hoses or preset timers for self-serve car wash systems
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In-Bay Automatic

- Ensure that the direction, arch, and timing of sprays on automatic car washes are properly set and that they shut off when no longer in contact with the vehicle
- Set timers to create a minimum 5-second dwell time for water to run off into the bay before exiting
- Calibrate spray bars to use no more than 55 gallons per basic wash

Conveyor Systems

- Install automatic high-level water cut-offs in all towel and chamois washing machines
- Fit all hoses with positive pressure nozzles or automatic timer shut-offs; never leave open hoses unattended