

Preventing Water Pollution from Charitable Car Wash Events

Charitable car wash events are a popular way for community groups to raise money for worthwhile causes. However, there is a potential “down side” to this activity: if runoff from vehicle washing is not properly managed, it can have a harmful impact on our surface waters, including arroyos, wetlands, creeks, lakes, and rivers. This fact sheet explains the concerns about water quality and provides alternatives for protecting the environment when conducting a charitable car wash event.

How does runoff from charitable car wash events affect water quality?

Runoff from car washing typically contains dirt (sediment), soap or detergent, traces of gasoline and motor oil, heavy metals, and residues from exhaust fumes and brake pads. When this dirty water is allowed to flow into stormwater drainage systems (storm sewers), it usually travels directly to our local waterways without treatment. Most municipal storm sewer systems in Arizona are NOT connected to wastewater treatment plants, like sanitary sewers are. Storm sewers may have recognizable features like storm drains, catch basins, and constructed channels, but they may simply consist of streets, roadways, and ditches that convey stormwater to surface waters. Although a single car wash event may not have much impact by itself, the runoff from multiple events in a region can add up to significant effects on surface water quality.

Ground water may also be affected if the activity is not managed properly. Many sites used for charitable car wash events contain “drywells” which may look like storm sewer drains, but are designed specifically for discharging stormwater into the ground rather than to surface waters. Under Arizona’s Aquifer Protection Permit laws and rules, discharges into drywells are limited to stormwater only, with few ex-



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ceptions. Discharges from car wash events into drywells are not permitted.

The Clean Water Act and Arizona’s discharge permit system

Under the federal Clean Water Act, associated regulations (40 CFR Part 122), and Arizona law (ARS § 49-255 et seq.), discharge permit coverage is required for any point source discharge to “waters of the U.S.” (surface waters). Runoff from a car wash event is a point source discharge if it reaches surface waters, either directly or through a storm sewer system or other conveyance. In Arizona, such permits are handled by ADEQ’s “Arizona Pollutant Discharge Elimination System” (AZPDES) program.

The AZPDES De Minimis General Permit (DMGP) is a statewide permit that provides automatic coverage (authorization) for certain types of discharges, including runoff from charitable, non-commercial car washes under specific conditions. To qualify for DMGP coverage, the site of the activity must be further than ¼ mile

from the nearest perennial or intermittent (seasonal) stream, river, or lake. Only the exterior of vehicles may be washed, using water alone or with phosphate-free cleaning agents made specifically for exterior car washing. Cleaning agents, if any, must be used according to label instructions, and water must be used only in the amount necessary to do the job. This Fact Sheet provides information about alternatives to discharging to surface waters, and about reducing pollution from charitable car wash events.

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What can my organization do to prevent water pollution from our car wash fundraiser?

ADEQ encourages sponsoring organizations to minimize pollutants discharged, and to reduce or eliminate discharges of wash water to the extent possible.

ADEQ recommends the following measures:

OPTION 1:

Partner with a local commercial car wash business for your fundraiser.

Most commercial car washes recycle their wash water, cleaning it and reusing it a number of times. When the wastewater is released, it must go into a sanitary sewer or other state-approved system for treatment prior to final discharge. Check with local car wash businesses on options they may offer to community groups, such as:

- **“Bay for a Day”:** The owner of a “self-serve” car wash facility may agree to rent or provide a bay where your group can conduct its fundraiser with efficient equipment and the benefit of the facility’s wash water recycling/disposal system.
- **Car wash ticket sales:** Some commercial car washes offer ticketing programs for community fundraising, in which your organization sells tickets that can be redeemed for vehicle washing at the facility whenever the purchaser chooses. Your group keeps or receives a share of the proceeds, is free from having to perform the actual car washing, and does not have to deal with “rain date” uncertainty.

With either arrangement above, your group eliminates the work of setting up its own car wash site and you don’t have to worry about managing runoff. An added benefit is water conservation: washing a vehicle by hand with a hose can use up to 148 gallons of water, but commercial car washes use only 12 to

72 gallons per vehicle, depending on the type of wash system.¹ Recycling of wash water by the facility reduces consumption even further.

¹Data source: Arizona Department of Water Resources, *Water Conserving Tips for Washing Your Car*, October 2008; revised January 2009.

OPTION 2:

Prevent wash water from entering the storm sewer system.

If you conduct a car wash event in a parking lot or other public space, consider blocking off storm drains to prevent runoff from reaching surface waters. You would then pump or direct the wash water to a sanitary sewer, or to a pervious area (grass or landscaping). In either case, be sure to obtain permission from the sanitary sewer utility or property owner, as appropriate. Keep runoff from entering drywells if present.

If you cannot avoid discharging wash water to storm sewers/streets:

- Wash only the exterior body of vehicles (no cleaning of engines or undercarriages).
- Use only plain water if possible. If necessary, use a phosphate-free car wash soap in accordance with label directions. Do not use degreasers, solvents, or acid-based cleaners.
- To minimize runoff, use only the amount of water needed to do the job, and use hose nozzles with automatic shutoffs.
- Keep runoff from entering drywells if present.
- Do not dump extra wash solution into the storm drain or street. Instead, dispose of it in a toilet, utility sink, or sanitary sewer drain/cleanout, if allowed by the sanitary sewer utility and the owner/manager of the facility you use.

For additional information:

AZPDES De Minimis General Permit web page:
<http://www.azdeq.gov/DMGP>

U.S. EPA “Safer Choice” Products:
<http://www2.epa.gov/saferchoice>



Pictured right: Runoff from car washing flow into stormwater drainage systems.