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Fish Toxicity Study:

**Untreated Water from Residential and Parking Lot Car Washes
Affects Water Quality of Local Streams, Lakes and Rivers**

SEATTLE, WASHINGTON – July 27, 2007— Water quality is at the top of the summer agenda for many municipalities as residents swim, fish and boat in recreational waters. However, many homeowners or organizers of parking lot car washes may not realize the effects of untreated car wash affluent on local water quality.

Environmental Partners, Inc., Issaquah, Seattle, conducted two tests in 2006 to measure the potential impact of untreated car wash discharges into the storm water system (and thereby to streams and lakes) using fish mortality as a measure. The independent study was underwritten by Vic Odermat, a lifelong environmentalist and owner of Brown Bear Carwash, Seattle, Washington.

Detergents and surface residue from driveway or parking lot car washes generally runs directly into the nearest storm drain. Most storm drains are designed to carry excess rainwater into nearby waterways without any additional cleaning of that water. Storm water run off is the most common source of pollution of streams, rivers, lakes, oceans and inlets, and can have a devastating effect on aquatic life.

In the Seattle study, fish toxicity tests were performed using a water runoff sample collected from a fund-raising car wash event held in a parking lot and compared against a simulated run-off sample that was potable. The car wash runoff sample caused 100 percent mortality of fish in all dilution steps tested, while all the fish survived in the potable water. Detergents, including those that are biodegradable, can be harmful to fish by destroying their protective mucus membranes. In addition, detergents can damage fish gills and wash away natural oils that help fish absorb oxygen.

Under the federal Clean Water Act, a commercial car wash can't send their dirty water into storm drains. The water must be discharged into a separate sanitary sewer or treated and recycled

In addition to washing your car at a professional car wash, other practical solutions to reduce the impact of driveway or parking lot car wash runoff into storm drains include:

- Wash vehicles on permeable surfaces, such as gravel driveways or on lawns, to allow waste water to be filtered through the soil instead of running directly into storm drains and streams;
- Use a bucket of water and a sponge for washing a car at home, and dispose of the dirty water in a sink, toilet or other sanitary sewer
- Block off the storm drain during a fundraising car wash event, and use an insert to collect the water. Dispose of the soapy water onto the grass or landscaping to provide filtration.

In addition to the impact detergents and surface residue can have on water quality, home car washing produces the second largest demand for peak summer water use after lawn watering. Professional car washes use less than one tenth of one percent of the water used by a municipality daily.

Many states are moving towards reducing untreated car wash effluent from entering storm drains. Car wash kits are available to non-profit organizations planning parking lot fundraisers. The kit includes a catch basin-device that captures car wash runoff, allowing it to be pumped either to a sanitary sewer for treatment or to a vegetated area. The Puget Sound Car Wash Association also sponsors an environmentally friendly fundraising carwash program. Nonprofit organizations can raise money by selling tickets redeemable at 30 professional car washes in the area.

Information on the Fish Toxicity Study and car wash fundraisers is available at www.brownbearcarwash.com and www.carcarecentral.com.