

Streams of conscience

Urban runoff fouls the ocean and we have only ourselves to blame

By Terry Rodgers
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Just because they give a hoot doesn't mean environmentally minded people don't pollute.

They do it when they leave the hose running when they wash their cars.

They do it when they accidentally over-water their lawns or gardens.

They do it when they engage in chemical warfare against pesky Argentine ants.

They do it when they experience temporary amnesia after their pets leave droppings.

When it comes to urban runoff – pollution picked up by rain or other water that isn't soaked into the soil – we're all as guilty as unleashed dogs with garbage-can breath.

With every rainstorm, pollution from San Diego County's nearly 3 million residents drains to the ocean, fouling vast stretches of its 76 miles of coastline.

Urban runoff contains bacteria, viruses and other pathogens, which studies have shown can sicken swimmers and surfers. Runoff also contains copper and zinc from car brake linings, pesticides, fertilizers and a potpourri of other pollutants.

"It's a witch's brew," said Steve Weisberg, director of the Southern California Coastal Water Research Project, an Orange County-based pollution research institute.

Regulatory efforts to curb storm water pollution have gained attention because of increased burdens on new developments to capture runoff. And for the first time, California cities are being forced to do real enforcement.

But the front line of this new war on pollution is the county's homes and gardens. Unless homeowners and gardeners realize how everyday activities add to urban runoff and begin to practice pollution prevention in earnest, efforts to reduce this insidious problem won't succeed.

Everyone from soccer moms to college dons has to do their part.

"Southern California is never going to be able to solve its storm-water problem unless we change the waste disposal behavior of all 20 million people who live here," says Mark Gold, director of Heal the Bay, a Santa Monica-based environmental group.

Like public awareness campaigns that gradually shifted society's attitudes toward recycling, educating people how to reduce their role in storm-water pollution may take decades, Gold said.
Control, contain, capture

Many San Diego residents harbor misconceptions about sources of beach pollution, a recent survey revealed.

Nearly 55 percent of the 433 people polled last year said they believed sewage spills were the leading cause. In fact, sewage spills annually account for only 7 to 10 percent of beaches postings and closures.

What is the major cause? Bacteria-laden urban runoff. It triggered 70 percent of last year's 189 beach contamination postings countywide.

"Raw sewage spills get a lot of media play because they're so revolting," says Deborah Castillo of the city's Storm Water Pollution Prevention Program. "Urban runoff doesn't trigger that same imagery or reaction."

"Most of us are unaware of how we contribute to urban runoff pollution in our daily lives, yet it's the silent, deadliest thing for our waters," said Castillo.

Castillo runs San Diego's Think Blue campaign, a \$500,000-per-year public education program on storm drain pollution. The effort is required by the state, which has ordered the county and the region's 18 cities to decrease runoff pollutants dramatically over the next five years. Think Blue's drum-beat message: Everything deposited on pavement – motor oil, fast-food containers, cigarette butts, pet waste and more – ends up in a creek, river or storm drain and from there, in the ocean.

As people start spring cleaning, Castillo urges them to practice the Three Cs: "All we want people to do is control, contain and capture any fluids that leave the site during the cleaning process."

Cleaning the right way means sweeping rather than hosing. Vacuuming up waste water rather than letting it go down a storm drain. Cutting down on bug sprays and fertilizers.

Even grass clippings and yard waste can cause bacteria growth when dumped into a watershed, scientists have found. So put green waste in a trash can, Castillo advises.

"We want people to think in a different way so they can enjoy the beaches this summer," says Castillo. "Personally, I used to be a die-hard car washer, but I've been driving around in a crusty car that hasn't been cleaned since last May."

The most environmentally friendly method to clean your vehicle is at a commercial car wash. But, if you feel an unbearable desire to chamois your Chevy in your driveway, limit the amount water by using a nozzle at the end of the hose and clean your car over a lawn or an area that allows for evaporation of the runoff. Barring that, remove the dirty water with a wet vacuum and dispose of it in the toilet.

None of the store-bought detergents or car cleaners is biodegradable, no matter what the label says. Pollution patrol

In San Diego County and elsewhere in Southern California, the vast majority of storm drains aren't connected to sewage treatment systems, a fact not known by 42 percent of those surveyed last year.

A smattering of storm drains are connected to the sewer system, but these so-called dry weather diverters automatically shut down during a rainstorm to avoid overwhelming treatment plants.

Installed in seven coastal storm drains along Pacific Beach and La Jolla and within all 49 storm drains ringing Mission Bay, these diverters siphon off contaminated urban runoff generated by excess irrigation, leaky water pipes and other sources.

A separate storm-water treatment system could be constructed, but that costly option hasn't attracted much support. So for now, the region has adopted a regulatory approach to controlling storm-water pollution.

Later this year, cities will enact ordinances requiring new developments and major redevelopment to reduce runoff pollution from their individual properties. The San Diego Building Industry Association is challenging the proposed regulations in court.

Stricter enforcement has also begun.

San Diego last year formed a six-member team of storm-water inspectors to respond to reports of illegal dumping and other pollution scofflaws. The Think Blue hotline averages 15 to 20 such calls daily.

A smattering of other cities including Encinitas and Santee have hired storm water inspectors, while the county and other cities are adding the responsibility to their existing building and engineering staffs.

Among recent whistle-blowers was University Heights resident Terry Weiner, who noticed green-colored runoff coming from a local car wash. She confronted the business owner, who admitted he had knowingly allowed wheel cleaner to go into a nearby storm drain for 12 years.

The car wash owner eventually was cited and fined.

Weiner said she was disappointed that it took several phone calls and repeated inspections by city officials to stop the obvious illegal dumping.

"The only satisfaction I got from turning him in was that the ocean was going to be relieved of so many thousands of gallons a day of terrible toxic run-off," she says.

Last year, San Diego's pollution police issued 317 citations to businesses and individuals for minor violations and 397 violation notices for more serious offenses.

The county's inspectors haven't yet started strict enforcement, preferring instead to issue warnings and counsel all but the worst violators.

Water wise

A few green-thinking folks are already ahead of the curve.

Living in a densely populated, inner-city neighborhood didn't weaken the resolve of Edward Di Bella to reduce runoff at his City Heights home.

Di Bella retrofitted his home's downspouts with diverters that funnel rain water from his roof to plastic barrels, a project that cost a few hundred dollars.

With the 700 gallons of rain water he collected last year, Di Bella was able to water nine fruit trees and a small vegetable garden without turning on a hose for 6 months.

Due to the worsening drought, he has collected only about 500 gallons of rain water so far this year. While his water bill savings won't offset costs of installing the system for many years, Di Bella says he was motivated by conservation, not cost-benefit ratios.

"My prime interest is in self reliance – doing as much for myself as I can in advance of the serious water crisis that's coming in our future," he says. "By cutting down on urban runoff, we can promote good conservation and protect natural or open space habitats."

In 1997, the Los Angeles-based TreePeople, a non-profit environmental agency, assembled dozens of experts who designed water-retention devices for residential, industrial and commercial sites.

To demonstrate the effectiveness of such devices as sunken gardens and cisterns that capture runoff for later use as irrigation, TreePeople installed them at a parcel with a single family home in South Central Los Angeles. A tutorial on the project is on the agency's Web site: www.treepeople.org/trees.

TreePeople spokesman David O'Donnell says individual homeowners willing to do the work themselves can retrofit their property to capture nearly all runoff for about \$1,500.

"Catching the water that falls from the sky is taken for granted in most dry climates," says TreePeople spokesman David O'Donnell. "We've been living in La La Land here."

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Think Blue

A homeowner's guide to reducing urban runoff

When washing a car:

Do: Use a nozzle on the hose.

Don't: Allow hose to run.

Do: Wash over a lawn or area that will absorb the waste water.

Don't: Wash over pavement that drains to a storm drain.

When gardening:

Do: Use organic gardening methods, such as controlling aphids or white fly with a squirt bottle of water.

Don't: Overuse insecticides.

Do: Use mulch to conserve water and reduce need for herbicides.

Don't: Overapply fertilizers or fertilize when the weather forecast is for rain.

Do: Landscape with native plants.

Don't: Plant non-native species that require a lot of water and/or create a lot of green waste.

Do: Place green waste in a trash can or recycle container.

Don't: Use a blower to push grass clippings or other green waste into the street.

Do: Use water-conservative irrigation methods such as drip irrigation.

Don't: Overwater or allow excess irrigation water to flow down the street or into a storm drain.

When doing routine cleaning:

Do: Use a pooper-scooper or plastic bag to pick up pet droppings.

Don't: Leave pet waste on the ground.

Do: Use a broom or other dry-clean methods such as a mop.

Don't: Use a hose for cleaning sidewalks or patios.

Do: Dispose of mop water down the toilet or sink.

Never:

- Dump used motor oil into a storm drain. Take it to a recycling center.
- Clean paint brushes so that the dirty water drains to a gutter or storm drain.
- Put anything down a storm drain you wouldn't want to swim in.

For more information: www.thinkbluesd.org. To report an illegal discharge within the city of San Diego, during business hours, call (619) 235-1000. For discharges in other areas call the regional hotline at (888) THINK-BLUE (844-6525).