

Urban Runoff



What is urban runoff?

Urban runoff is the term for water that flows over man-made surfaces in densely populated areas and drains into nearby waterbodies. Runoff can come from many sources like rain, snowmelt, overwatering a lawn, washing a car in the driveway, or leaks. When this water falls on natural surfaces, it tends to move more slowly and soak into the ground. When water falls on man-made surfaces like asphalt, it



Figure 1. Urban runoff carries pollution into storm drains, which lead to creeks and eventually the ocean. Source: Shannon Switzer

cannot soak in and instead runs across the surface and picks up any pollutants in its path. This mix of water and everything it has picked up —now called urban runoff - carries pollutants into rivers, creeks, lakes, or storm drains that drain into the ocean.

DID YOU KNOW?

Many surfers and swimmers know to avoid getting into the ocean for the first 72 hours (3 days) after rainfall. This is because polluted urban runoff flows from developed areas into the ocean every time it rains, causing serious health hazards for ocean recreators and marine life alike.

Urban runoff represents the biggest pollution threat to the health of San Diego's waters. Some of the most common pollutants in runoff include lawn fertilizers, industrial metals, trash, sediment, and pet waste. Each of these pollutants degrades the environment and puts the health of San Diego's people

and wildlife at risk. Pollutants contained in runoff can cause infections in humans, threaten environmental health by lowering **water quality**, can cause toxins to build up in fish, lead to toxic algae blooms, and degrade important wildlife habitat.

Solutions to pollution

Tackling urban runoff takes collaboration. Rather than starting at a single source, runoff comes from the countless everyday activities of all of us. San Diego's large area and dense population make fighting runoff complex, but once pollution is in our water, it's even harder to clean up. That's why it's better to prevent pollution in the first place.

urban runoff: water that flows across developed land and drains into a body of water

While tackling pollution in runoff might seem like a big challenge, San Diego Coastkeeper is committed to reducing its impact. Coastkeeper fights for increased water quality protections and advocating for practices that keep pollution from getting into our waters. You can do your part by preventing urban runoff in your community. Check out the ideas below to learn how you can help. Together, we can keep San Diego's water clean for all to enjoy.

water quality: a measurement of how clean or polluted a body of water is

HOW CAN I HELP?

Here are some ways you can prevent pollution in your community:

- Always, always clean up after your dog
- Take your car to a car wash, where water is filtered and reused, instead of washing it in the driveway
- Ensure your car isn't leaking oil onto the driveway, parking lot, or street
- Avoid over-watering the lawn and fix leaky sprinklers
- Use pesticides and fertilizers sparingly, or plant native plants instead
- Capture rainwater at home to feed your plants
- Create less waste by switching to reusable items
- Pick up litter at one of our beach cleanups



Figure 2. Urban runoff flows from a storm drain outfall to the ocean in La Jolla. Source: San Diego Coastkeeper



Figure 3. A sign warns beachgoers about the danger of swimming near storm drain outfalls. Source: San Diego Coastkeeper

References

Photos: Shannon Switzer, San Diego Coastkeeper

San Diego Coastkeeper (2019). *Urban runoff*. Retrieved from <https://www.sdcoastkeeper.org/urban-runoff>

San Diego Coastkeeper (2018, October 2). Beyond the beach cleanup: how conserving at home protects the ocean [blog post]. <https://www.sdcoastkeeper.org/blog/uncategorized/beyond-the-beach-cleanup-how-conserving-at-home-protects-the-ocean>