

Storm Water Runoff Can Pollute

In a rainstorm, some rainfall will infiltrate or soak into the ground and some will become runoff. Infiltrated water will percolate through the soil and replenish the ground water that wells tap into. Runoff can cause serious pollution problems.

With every house that is built, a considerable expanse of impervious surface is added. A vacant lot can absorb rainfall over its entire surface, but when roofs, sidewalks, driveways, streets, and parking lots are installed, all of the rainfall striking these surfaces runs off and there is very little infiltration. Runoff from residential areas can quickly pick up pollutants while traveling to the nearest storm drain.

The most common pollutant is sediment, soil particles carried in suspension by the runoff, that makes “muddy” streams. When runoff slows down the sediment will drop out of suspension. Pollutants such as fertilizers or pesticides can be carried in runoff either in solution or attached to sediment particles. Other water-borne pollutants include pathogens, fecal coliform (which could come from wild animal or pet waste), gas, oil, grease, and exhaust particulates that wash off streets, and parking lots. Use caution when swimming in rivers after heavy rains.

In suburban areas, runoff eventually flows into the storm drain system, headed for drinking water reservoirs and the Bay. It is far easier and more cost-effective to solve pollution problems at the source. Once polluted runoff leaves your property, it becomes a public and much more expensive problem.

Suburban developments built since 1984 have been required to provide permanent stormwater management practices that treat runoff and slowly release it to the nearest stream. This slow release prevents the concentrated flow that results in stream bank erosion, which can cause many thousands of tons of sediment from the collapsed stream banks to be moved downstream.

Tips for Reducing Runoff

- The first and simplest rule of conservation is maximize infiltration of rainfall and minimize runoff.
- Protect soil with grasses, shrubs, trees, or mulch. This will make the soil more resistant to erosion and more likely to absorb the maximum amount of rainfall before runoff begins to occur.