

**Table 1-1
Common Pollutants in Urban Runoff and Associated Impacts**

Pollutant	Sources	Impacts
Solids (suspended sediment, floatables, dissolved chloride, sulfates)	Litter, road runoff, soil erosion from construction, streambanks, croplands and untreated sites, cleared vegetation, human & animal waste, vehicle fuels & fluids, vehicle wear, industrial/household chemicals, industrial processes, pool waters discharged improperly, road salt used for de-icing, snow runoff	Increased turbidity, reduced light penetration, impaired respiration for aquatic life, impairment of fishing resources, increased sedimentation, toxic to aquatic life, prevents vertical spring mixing
Biochemical Oxygen Demand	Decaying vegetation, excessive growth of vegetation, soil erosion, human & animal waste, vehicle fuels & fluids, vehicle wear, industrial/household chemicals, industrial processes, pesticides	Kills aquatic life
Metals (Cadmium, Chromium, Copper, Iron, Lead, Mercury, Nickel, Silver, Zinc)	Road runoff, tire wear, wear of clutch and brake linings, soil erosion, human & animal waste, vehicle fuels & fluids, vehicle wear, industrial/household chemicals, industrial processes, paints, pesticides	Toxic to aquatic life, potential for ground water contamination, accumulates in fish and shellfish tissues that may be consumed by humans
Pathogens (bacteria, fecal coliform)	Septic tank overflows/leaks/failures, illicit discharge from sanitary sewers into storm sewers, sanitary sewer over flows, untreated or inadequately treated sewage, animal waste	Unsafe conditions for human contact/swimming, closed beaches, contaminated ground and drinking water
Oil (oil, grease, fuels, lubricants)	Industrial spills, runoff from streets, gas stations, & parking lots, improper disposal of used oil into storm drains, business districts, shopping centers, office parks, vehicle fuels & fluids, fuel combustion, industrial/household chemicals, industrial processes, paints	Kills aquatic life, builds up in sediment and remains for a long time
Nutrients (Nitrogen, Phosphorus, Nitrates)	Agriculture, improper composting and yard waste disposal, septic tanks, soil erosion, cleared vegetation, fertilizers, animal waste, fuel combustion, industrial/household chemicals, industrial processes, atmospheric deposition onto impervious surfaces that become runoff	Depressed dissolved oxygen levels, elevated phytoplankton populations, fish kills by hypoxia & anoxia, release of toxins from sediments, decreased fisheries yields, may contaminate ground water, excessive plant growth
Herbicides, Pesticides, Insecticides	Improper or excessive use of lawn chemicals, agriculture	Algae blooms, fish kills