

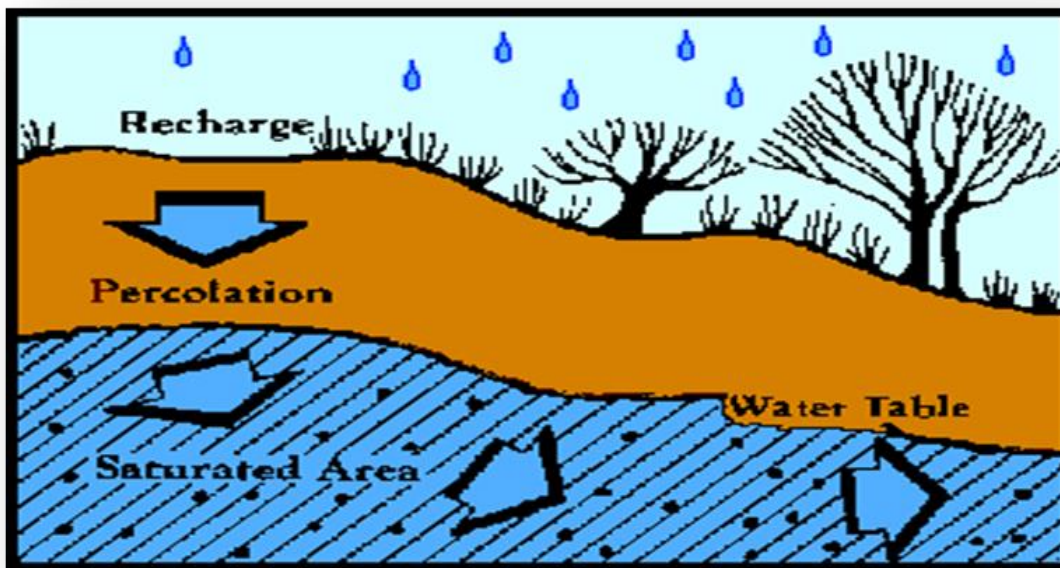


## The TrueGrid System and Storm Water Run-Off

### How does TrueGrid help fight storm water run-off and other pollutants?

One of the many TrueGrid system is to reduce pollutants that are running off into rivers, lakes, bayous, oceans, etc.... Along with eliminating the costs for retention/detention ponds, and other storm drainage elements. TrueGrid's permeable surface and sub-base temporarily store rainwater runoff before infiltrating into the subsoil. TrueGrid allows rainwater that would normally runoff into rivers and streams, to infiltrate directly into the soil and receive water quality treatment. Hydrocarbons from cars, pet waste, nitrogen, and other pollutants are filtered and removed by bioremediation, before polluting the ground water. Asphalt, concrete or other impermeable surfaces would otherwise carry these pollutants to storm sewers, streams, and reservoirs.

To summarize....TrueGrid Permeable Pavers allows for filtered water seepage to groundwater recharge while preventing stream erosion problems. It captures the heavy metals that fall, preventing them from washing downstream and accumulating inadvertently in the environment. In the void spaces, naturally occurring micro-organisms digest car oils, leaving little but carbon dioxide and water.



## Structural BMP Expected Pollutant Removal Efficiency

BMP (Best Management Practices)

Typical Pollutant Removal (percent)					
BMP Type	Suspended Solids	Nitrogen	Phosphorous	Pathogens	Metals
TrueGrid	75 – 100	75-100	40 – 75	75 – 100	75 - 100
Dry Retention Basins	30 - 65	15 – 45	15 – 45	< 30	15 - 45
Retention Basins	50 – 80	30 - 65	30 - 65	< 30	50 – 80
Constructed Wetlands	50 – 80	< 30	15 - 45	< 30	50 – 80
Infiltration Basins	50 – 80	50 - 80	50 - 80	65-100	50 – 80
Infiltration Trenches / Dry Wells	50 – 80	50 - 80	15 - 45	65-100	50 – 80
Grassed Swales	30 – 65	15 – 45	15 – 45	< 30	15 – 45
Vegetated Filter Strips	50 – 80	50 – 80	50 – 80	< 30	30 – 65
Surface Sand Filters	50 - 80	< 30	50 – 80	< 30	50 – 80

Source: Adapted from US EPA, 1993c.