## Stormwater and Trees Urban Stormwater

It flows on top of paved surfaces to nearby rivers and streams picking up...

## **NUTRIENTS & BACTERIA:** Lawn

fertilizers and animal waste

Major cause of shellfish closures in Puget Sound

COPPER: Brake pad deposits on paved surfaces from vehicle wear and tear, pesticides Toxic to fish at low levels

PAHS: Polycyclic aromatic hydrocarbons from woodstove and fireplace combustion, vehicle combustion, creosote-treated wood

Toxic to humans as it enters the food chain

Precipitation

Stormwater drains concentrate large volumes of water and pollutants

## OIL & PETROLEUM:

Drips, leaks, and emissions from vehicles OTHER HEAVY METALS: Roof material leaching, vehicle tire abrasion, aviation fuel combustion

Toxic to wildlife and people

How much stormwater?

For every inch of rainfall, one acre of paved surface can generate 27,150 gallons of runoff Stormwater picks
up many contaminants on it's way to
creeks and the
Ohio River.

However, trees can help prevent water runoff by providing other places for the water to go. In addition to promoting absorption, leaf coverage also protects soil from erosion.

Tree roots and leaf litter promote slow absorption of water back into the ground

> Precipitation Throughfall

Tree canopy intercepts raindrops, prevents erosion

Reduced volume of water runoff reduces erosion and pollutants downstream

Infiltration

Groundwater Recharge