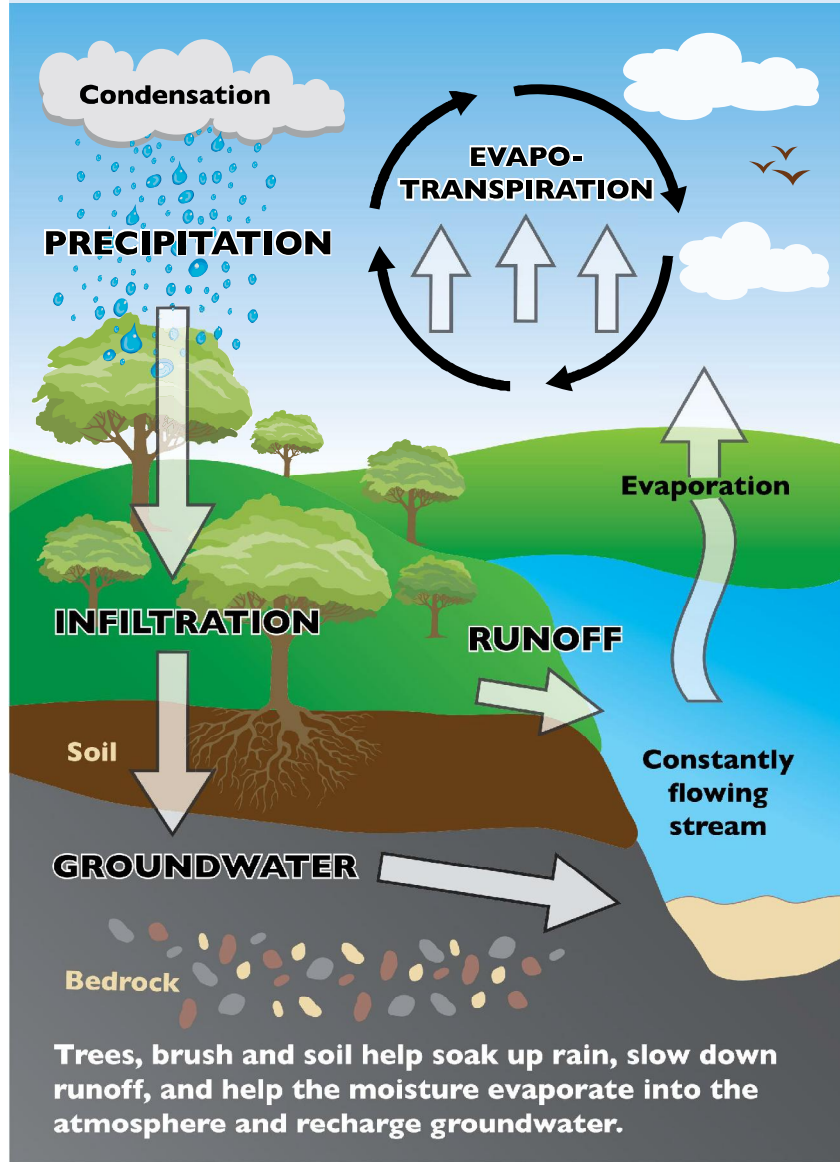
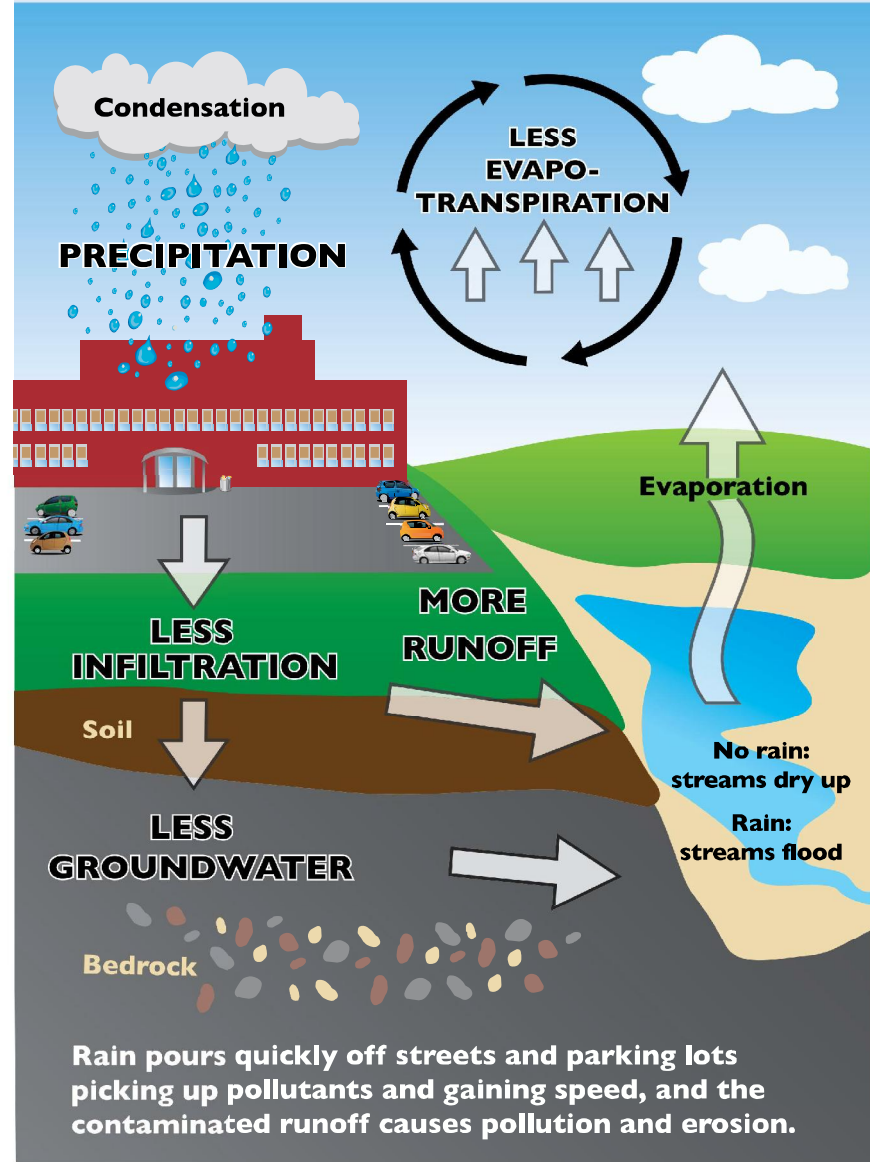


NATURAL VS. URBAN WATER CYCLE

THE NATURAL WATER CYCLE



THE URBAN WATER CYCLE



STORMWATER MANAGEMENT

WHAT DOES IT DO?

Stormwater Management (SWM) tries to restore the **NATURAL** water cycle to the **URBAN** landscape.

WHAT IS RUNOFF?

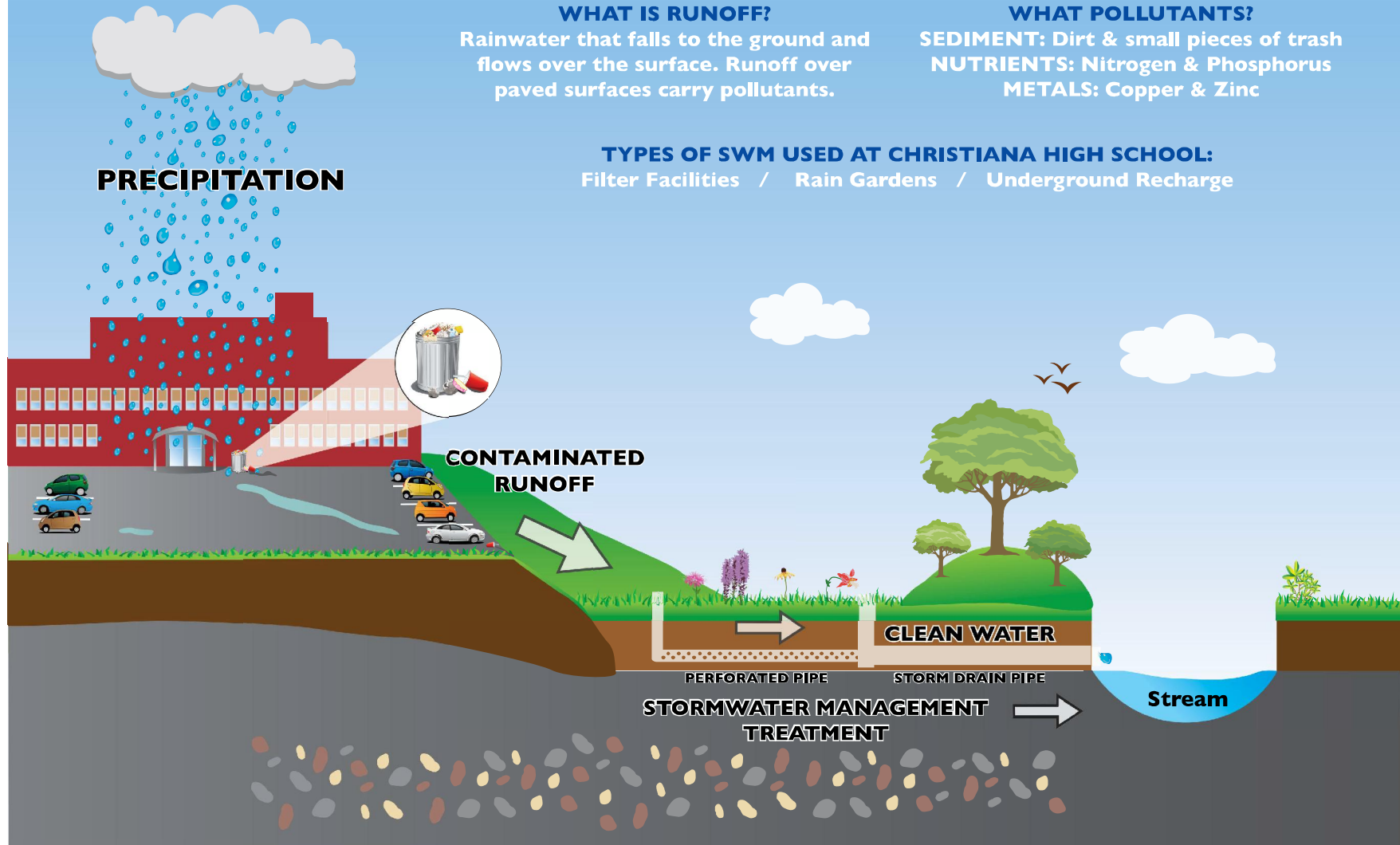
Rainwater that falls to the ground and flows over the surface. Runoff over paved surfaces carry pollutants.

WHAT POLLUTANTS?

SEDIMENT: Dirt & small pieces of trash
NUTRIENTS: Nitrogen & Phosphorus
METALS: Copper & Zinc

TYPES OF SWM USED AT CHRISTIANA HIGH SCHOOL:

Filter Facilities / Rain Gardens / Underground Recharge



FILTER FACILITIES

**FILTER FACILITIES CAN REMOVE
97% OF SEDIMENT AND 24% OF NUTRIENTS FROM RUNOFF**

SURFACE MATERIAL (Mulch & Native Plants)

Mulch slows down runoff and prevents surface erosion. Facilities use native plants with deep, dense roots to absorb some of the rainwater. Diverse plants also attract wildlife and add beauty.

FILTER MATERIAL

Cleans the water by filtering pollutants through special filter media containing sand, soil and organic materials that consume nutrients.

GROUNDWATER RECHARGE

Filtered water then gets stored in a layer of gravel where it slowly seeps into the ground and resupplies the groundwater.

