

STORMWATER

NITRO, WV

NEWSLETTER

OCT. 2022

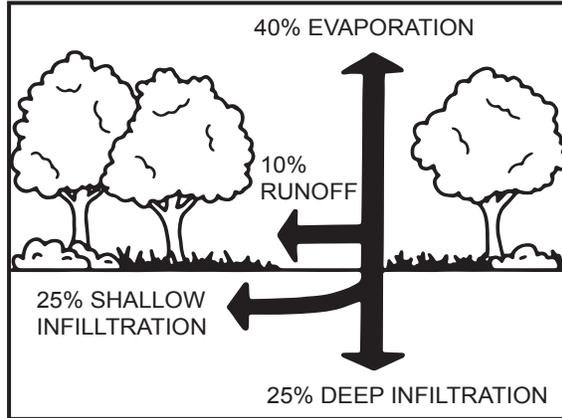
STORMWATER RUNOFF

Storm water runoff is rain and snow melt that flows off building rooftops, driveways, lawns, streets, parking lots, construction sites, and industrial storage yards. Developed areas are covered by buildings and pavement (impervious areas), which do not allow water to soak into the ground. Storm sewers are used to collect stormwater runoff from impervious areas and take it directly to local water ways with no treatment.

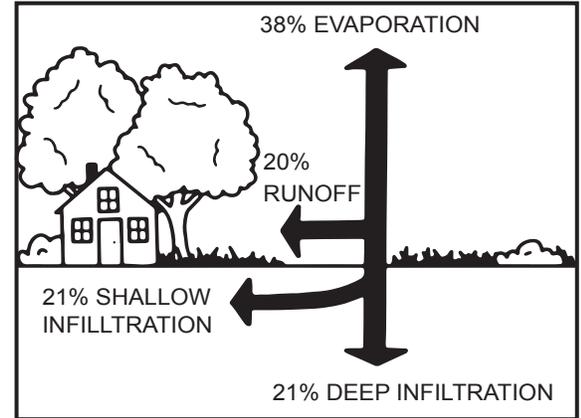
Prior to modern urban development, precipitation was typically absorbed by the ground after storms, with water slowly seeping into underground basins. But, as more ground became covered by buildings, roads and other infrastructure, runoff was directed into storm sewer systems designed to drain areas quickly and help to prevent flooding. Today, these storm systems continue to send stormwater to the nearest streams, lakes, rivers, and the ocean - without treatment. This is particularly the case in urban areas with impervious surfaces such as pavement.

The graphic below shows the effects of stormwater runoff on various different surface areas from no impervious area to roughly 100% of impervious area. Look at the chart and then think about which category your property or even parts of the city would be. You'll find more impervious areas than you think.

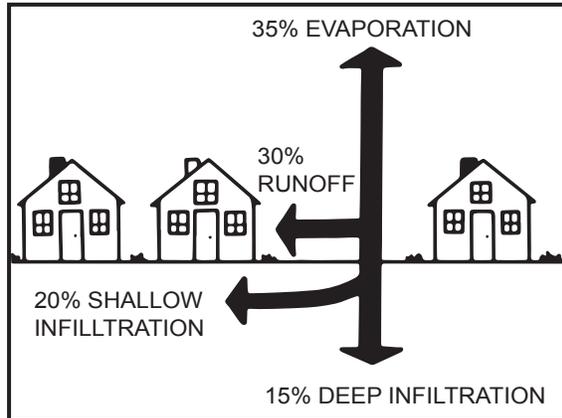
NATURAL GROUND COVER



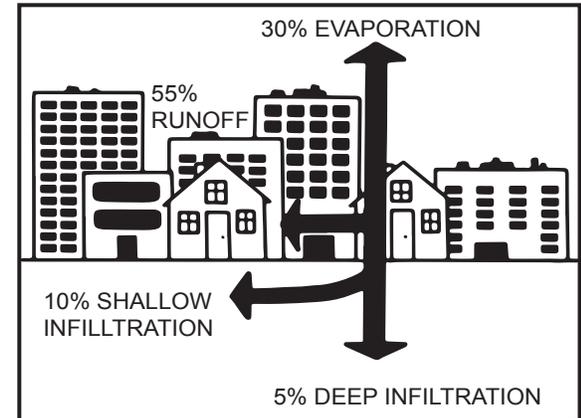
10%-20% IMPERVIOUS SURFACE



35%-50% IMPERVIOUS SURFACE



75% to 100% IMPERVIOUS SURFACE



For MS4 communities stormwater runoff is sent into a system of catch basins, pipes, culverts, ditches, and outlets directly into the river in order to get the water away from buildings as quickly as possible in efforts to prevent flooding.

Nitro is in a unique situation with its MS4 program because the city does not currently have completely separate sanitary and storm systems. About 75% of Nitro's sanitary and stormwater lines are still one combined system. For this combined system, the stormwater does not go directly into a local body of water. The stormwater runoff that goes into these still connected lines goes to the sanitary sewer plant and is processed like sanitary waste for safety. Nitro is currently working on separating their combined lines out into two systems, but it is a slow and very expensive process.

ADD A RAIN BARREL TO YOUR PROPERTY: The City of Nitro is selling DIY rain barrels! To purchase one go to Nitro City Hall to make your payment. They will then direct you to the Nitro Public Works Garage, with your receipt, to pick up your DIY rain barrel which will include a 55 gallon barrel and a kit with all the parts needed to create your rain barrel.