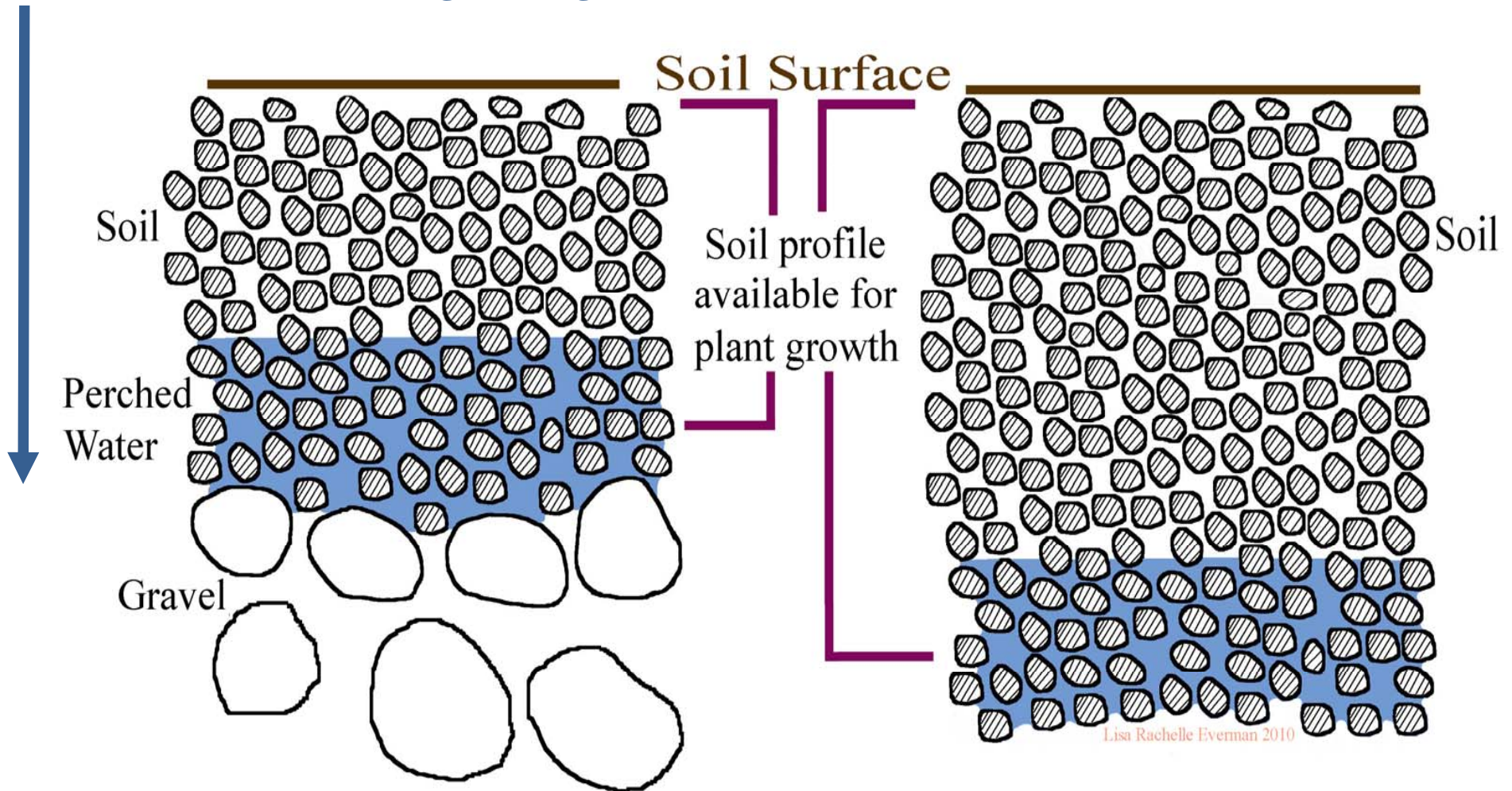


Perched Water Table

direction of water flow during watering or rain



A perched water table occurs because the capillary forces of the fine gravel (or soil) are stronger than the capillary forces of the coarse gravel. (www.turfdoctor.com) If you have ever done the experiment where you dropped pennies in a glass of water until the water level rose above the rim of the glass, you have observed the strength of water's surface tension. It is this property of water that allows water to travel up the xylem of a tree trunk to supply the leaves with water and nutrients. It should be noted as a result of the perched water table phenomena that adding gravel or pottery shards to the bottom of a pot **reduces the soil profile available for plant growth, and reduces the drainage of the soil profile.**