

## Human Factors:

Human factors are anthropogenic effects in the surrounding environment. Trees, pavement, buildings, piping; they are all place there by humans, and are created to meet the high standards the creator. However, they can also have some nocuous effects on the environment. These harmful factors include pavement, fire hydrants, litter, gravel roads or tracks, shade from obstructions, human use of an area, trees, and buildings. Pavement, for example, is made of Portland cement, gravel, and sand. The mixture is compacted, and then cooled. When poured and set, the pavement not only kills any growing **organisms** where it is placed, it also repels water. The rain will carry any dirt, chemicals, or other harmful material that collects on the pavement away. The grit will set in streams, possibly leading to soil erosion. The silt from the soil can cover the breeding grounds for fish. If the water cannot filter through the gravel on the river floor, the fish eggs cannot hatch.



Fire hydrants are also potential hazards to the environment. When inserting the hydrant, any soil underneath is dug up, temporarily ceasing plant growth. The water flowing through the pipes is taken from streams and rivers. One positive effect, however, is that fire hydrants store the water used to extinguish fires.



Human factors do not have to be man-made. Trees planted by humans are also factors. The height, location, and type of tree can determine plant growth in the surrounding environment. The taller the tree is, the longer the shadow it casts. The shadow length affects the plant growth in that area of land.





