

Tile Drainage

Tile drainage is a water table management process that has some conservation related aspects. Tile drainage is a practice in which tile runs are placed into an agricultural field in order to lower the water table. The water table is the underground boundary between the soil surface and the area where groundwater saturates. Pipes are laid in the tile runs in order to direct water into a specific downstream site. If a site is uphill a pump will be needed in order to direct water into the basin. The reason that tile drainage is necessary is because if the water table is too high (soil is supersaturated) there is little to no oxygen in the soil making it difficult for crops to grow. However, if the water table is lowered excess water is removed from the soil thereby increasing the amount of air in its pores and space for roots to grow. Benefits of tile drainage related to conservation is reduction of soil erosion as well as improved water quality. Additionally, there will be less downstream water runoff from fields due to a higher yield of crops and lower water table.

