

TOPIC:

AQUIFER SENSITIVITY to CONTAMINATION

Overview

The transport of most potential groundwater contaminants from the surface to the water table occurs in the aqueous phase; therefore, recharge represents a significant control on aquifer sensitivity to contamination. Knowing where recharge rates are likely to be higher or lower within a watershed could lead to an improved basis for evaluating aquifer sensitivity to contamination. Recharge processes are generally controlled by characteristics of the land surface, geologic matrix in the unsaturated zone, hydrologic characteristics of the unsaturated zone, and land cover. Processes that control the migration of water into the subsurface can also control the migration of pollutants into the subsurface.

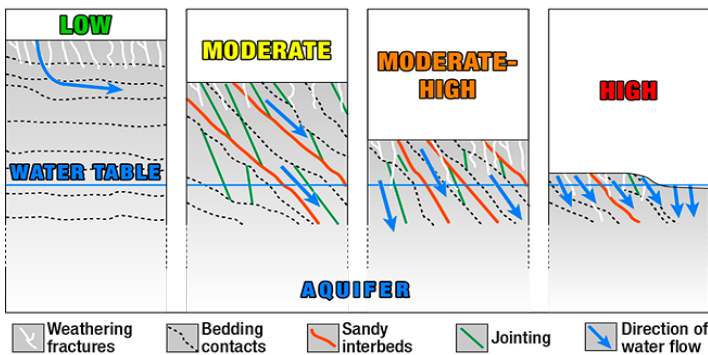
Impacts on Our Water

Decision support tools are available to evaluate the potential impacts of land-use activities over sensitive hydrogeologic settings.

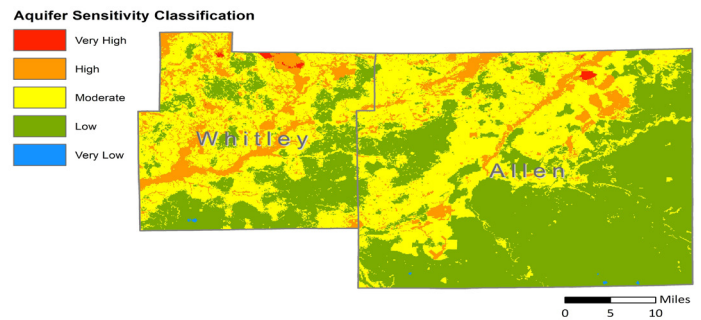
More Information

<https://igws.indiana.edu/GroundWater/GroundWater.cfm>

Sally Letsinger
sletsing@indiana.edu



Schematic illustration of the relationship of near-surface recharge to contaminant transport



Aquifer sensitivity to near-surface contamination in Whitley and Allen Counties, Indiana