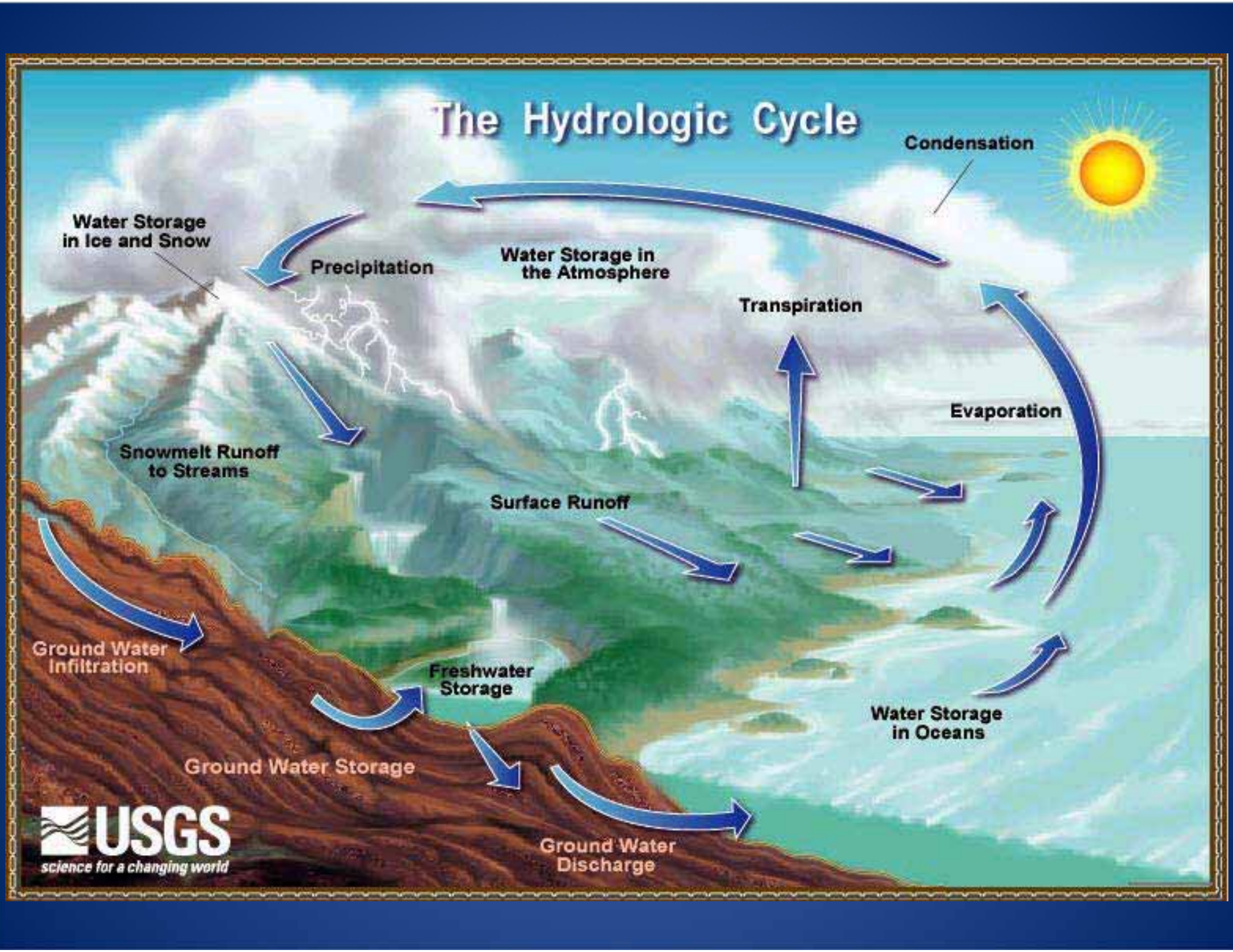
WHERE DO WE GET DRINKING WATER?

Children's Water Festival

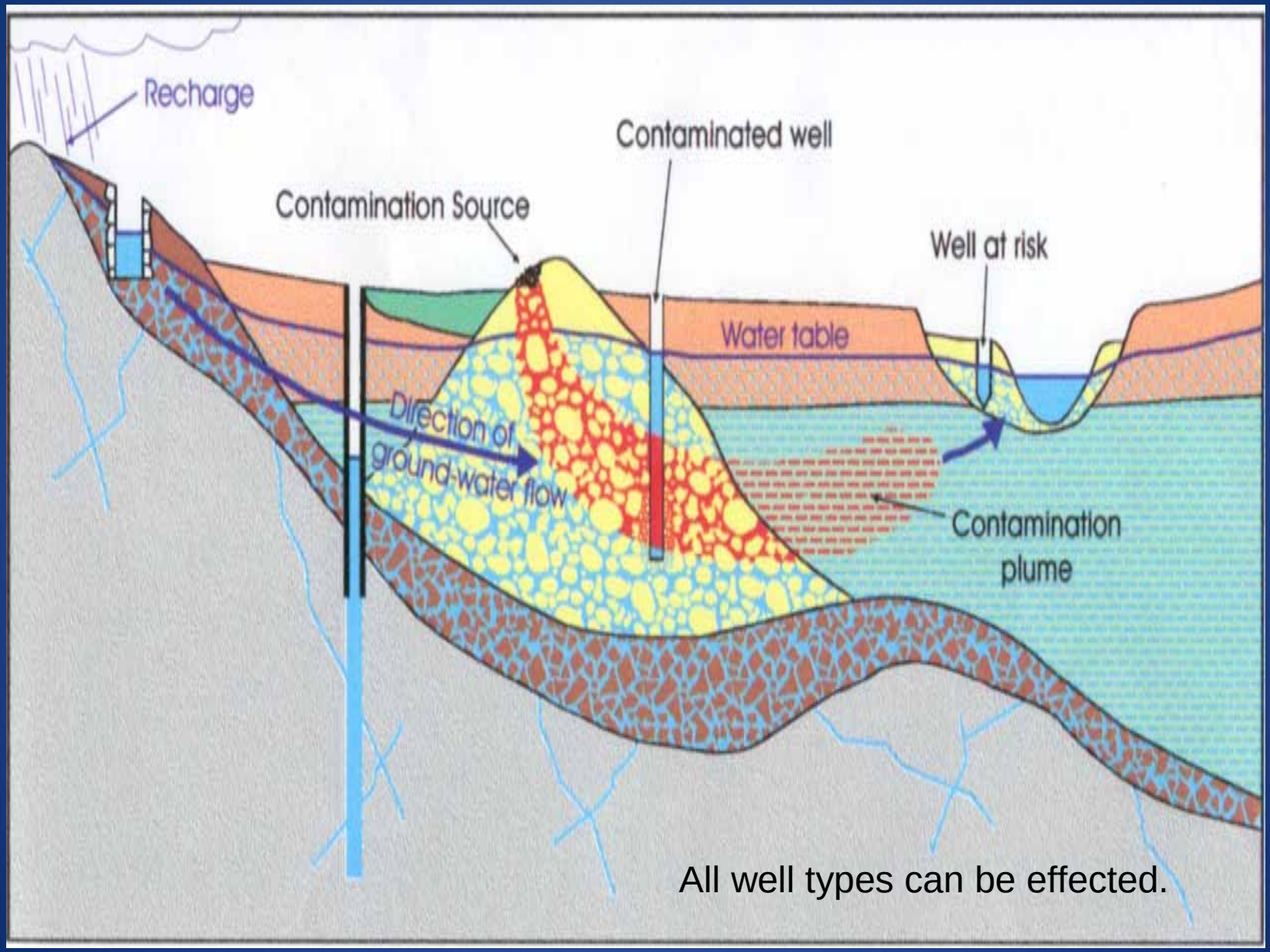
Teresa Thornton

October, 2008

WHERE DO WE GET DRINKING WATER?

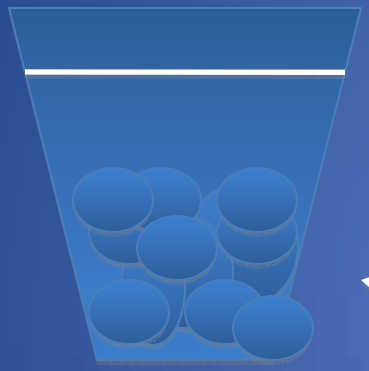

The Hydrologic Cycle
Condensation
Water Storage in Ice and Snow
Precipitation
Water Storage in the Atmosphere
Transpiration
Evaporation
Snowmelt Runoff to Streams
Surface Runoff
Ground Water Infiltration
Freshwater Storage
Water Storage in Oceans
Ground Water Storage
Ground Water Discharge
USGS
science for a changing world

CONTAMINATION OF DRINKING WELLS



MAKE AN AQUIFER!

- Fill 2 cups with layers of stone and then sand to about 3/4 from the top of each cup. (Remember that in nature, aquifers consist of layers of sand, gravel and rock.)



Fill to here with sand

Rocks on the bottom

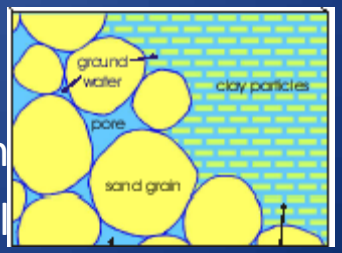
- IN THE FIRST CUP ONLY:

  Pour VERY LITTLE water SLOWLY into the cup.

  Watch how the water fills the spaces between the particles of sand and gravel.

Does the water appear to move faster through the sand or faster through the gravel?

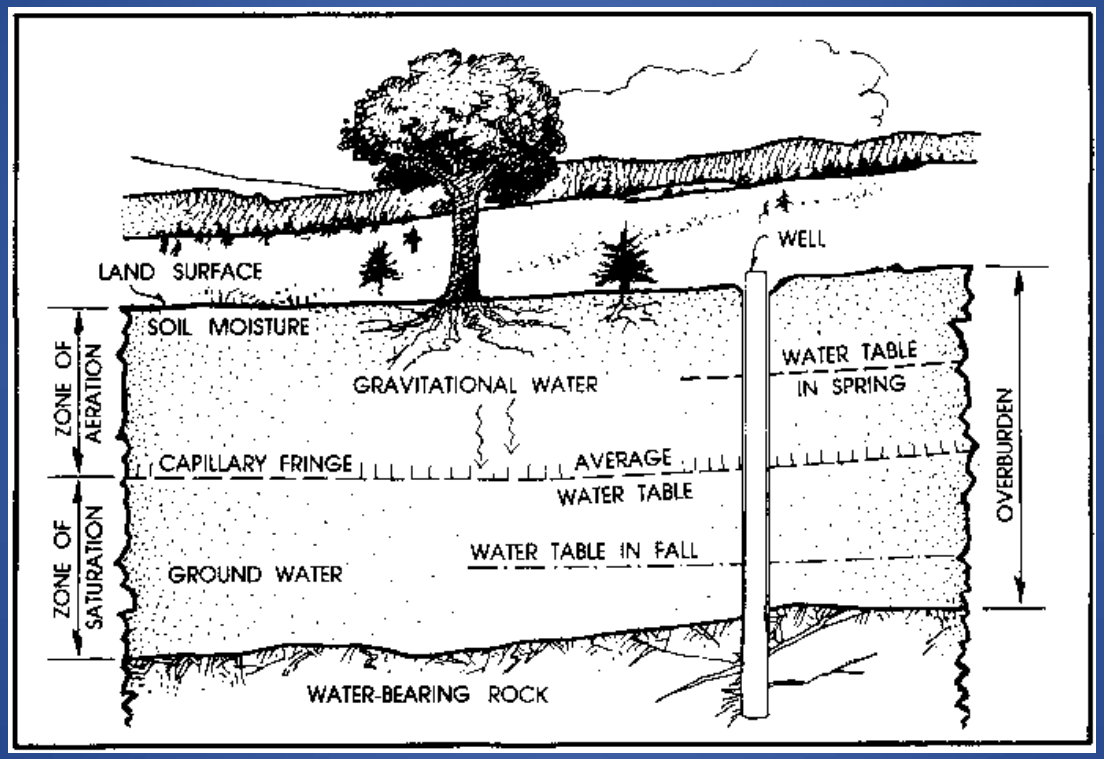
Why?



MAKE AN AQUIFER!

STILL THE FIRST CUP:

- SLOWLY pour water into the cup until the water line is about one inch below the top of the sand/gravel.



Look closely at this line created by the water.

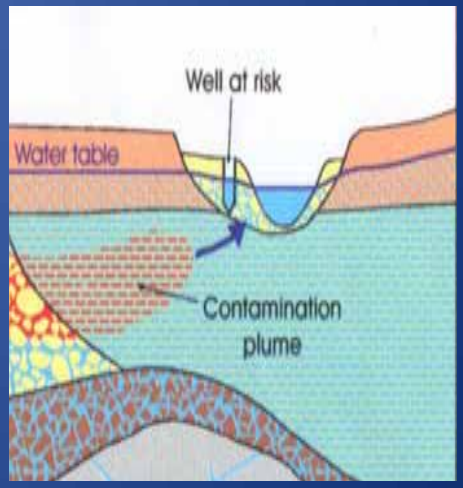
This line is called the water table.

Water below the water table is called the saturation zone.

MAKE AN AQUIFER!

STILL THE FIRST CUP

Continue to fill this cup with water to the top (above the top of the sand and gravel).



Water that is located above ground like rivers and lakes, is called surface water.
Water below the ground's surface is called groundwater.

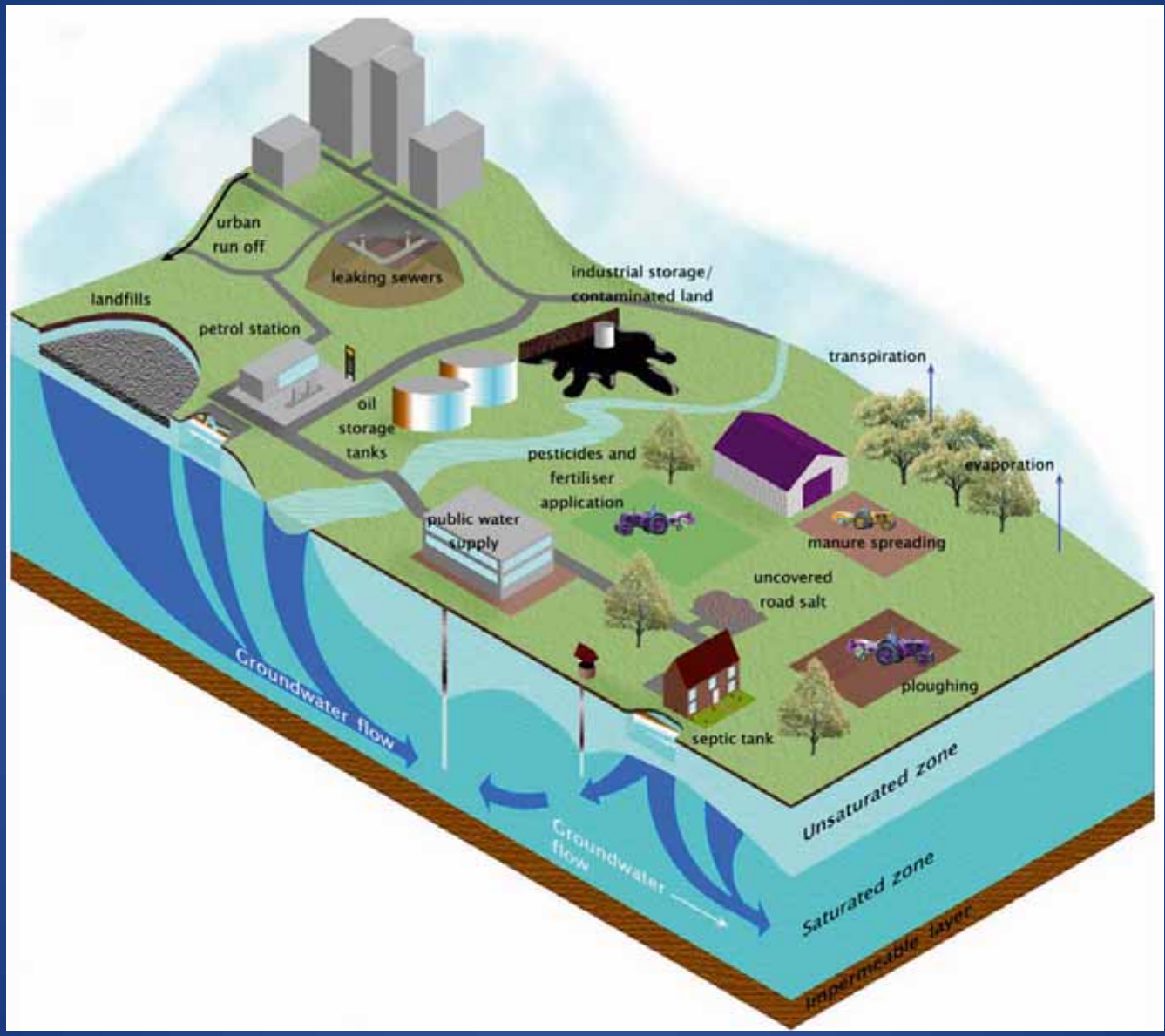
MAKE AN AQUIFER!

NOW THE SECOND CUP!

With your spoon sprinkle some of the “pollution” or “contamination” on the surface of the sand/gravel.

Now pour some water over the soil as if it were rain.

Observe and discuss what happens.



http://www.euwfd.com/assets/images/Groundwater-pollution02.jpg

WHAT CAN YOU DO?

THANK YOU
&
HAVE FUN!!!