

Earthy Sundaes

Adapted from The Groundwater Foundation
and the US EPA

This activity is an interactive way to study the layers that form aquifers and show the impact that contaminated groundwater can have on the environment.



- 4) Add more “sand/gravel” on top of the “confining layer”.
- 5) Colored sugars and sprinkles represent soils and should be sprinkled over the top to create the porous top layer (top soil).
- 6) Now add the food coloring to the soda. The food coloring represents contamination. Watch what happens when it is poured on top of the “aquifer”.
- 7) Point out that the same thing happens when contaminants are spilled on the earth’s surface.
- 8) Using a drinking straw, drill a well into the center of your aquifer.
- 9) Slowly begin to pump the well by sucking on the straw. Watch the decline in the water table.
- 10) Notice how the contaminants can get sucked into the well area and end up in the groundwater by leaking through the confining layer.
- 11) Now recharge your aquifer by adding more soda that represents a rain shower.
- 12) Review what you have learned as you enjoy eating your edible aquifer!

WARNING: Be sure to check with parents about food allergies or dietary restrictions!