Impact of Healthy Soil on Water Quality

Natural Resources Conservation Service (NRCS)

"Helping People Help the Land"

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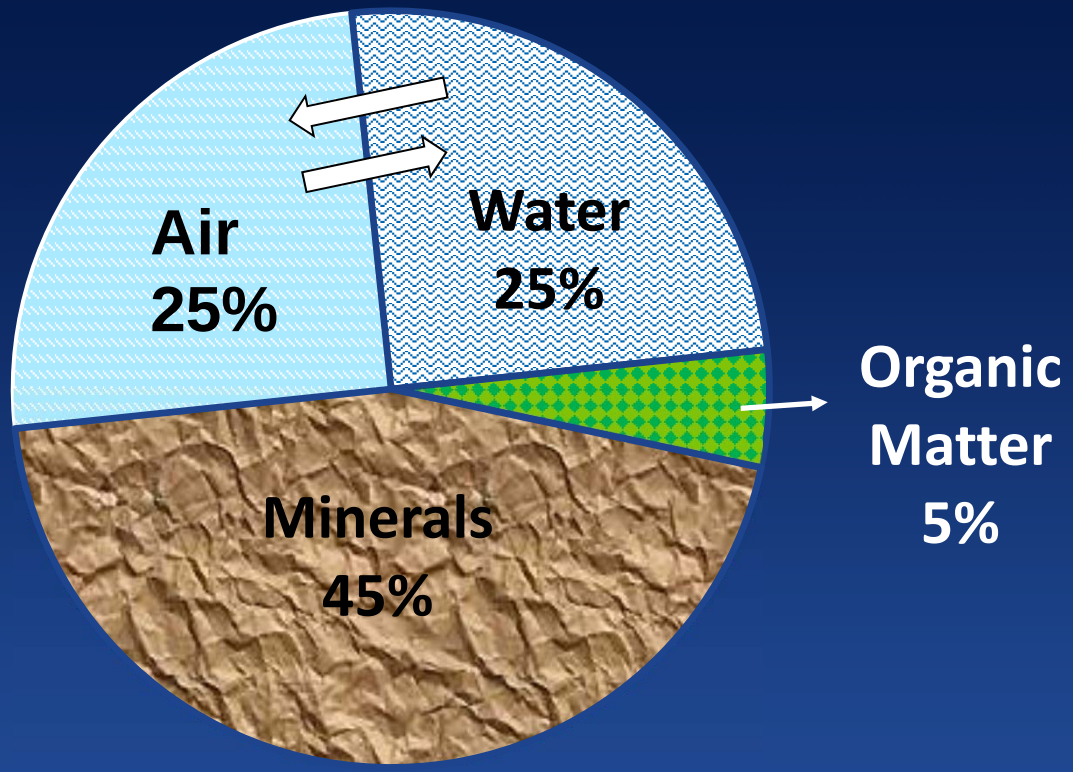
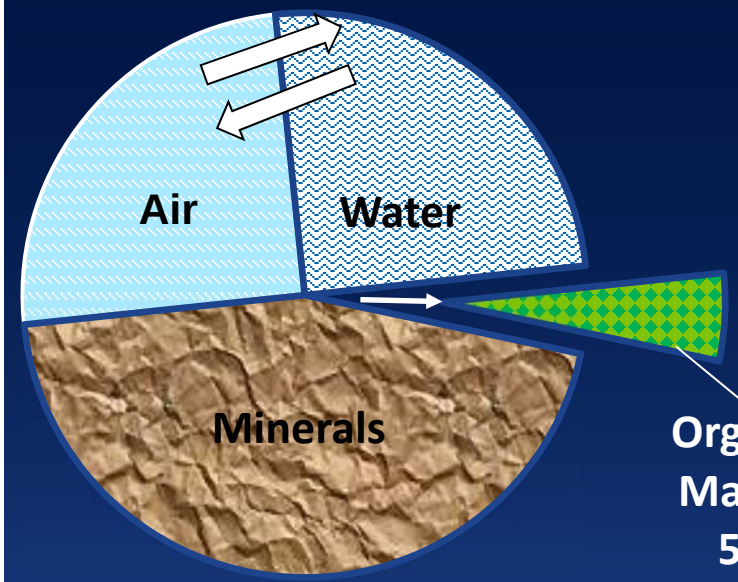
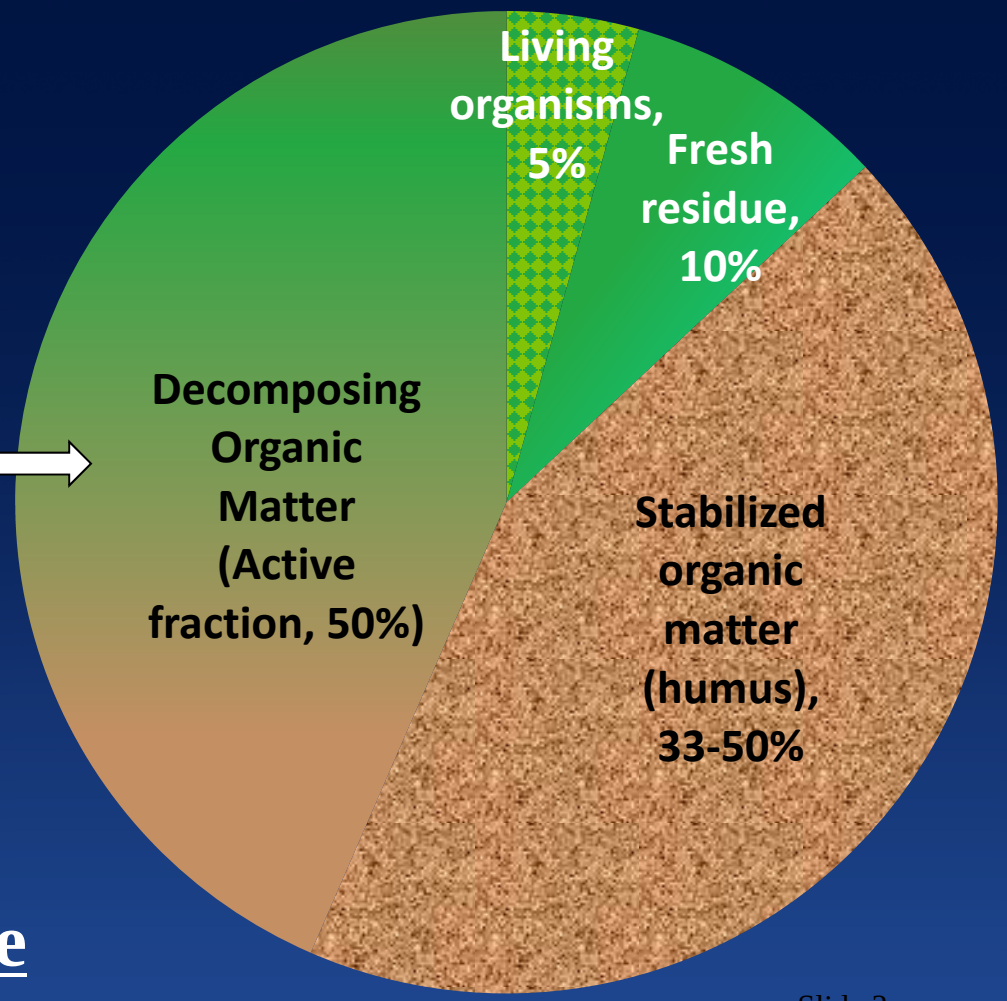
What is Soil?

Four main components:



Biological Properties

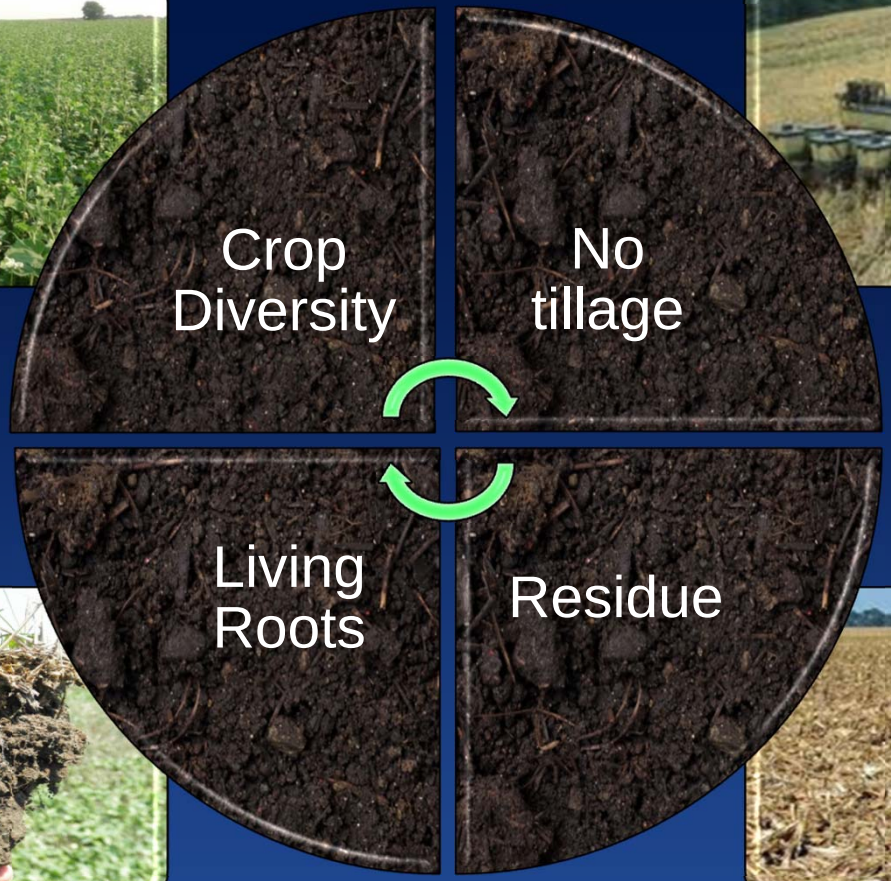




1% O.M. can hold up to 25,000 gallons of available water per acre

United States Department of Agriculture

Managing for Soil Organic Matter must include FOUR key principles.



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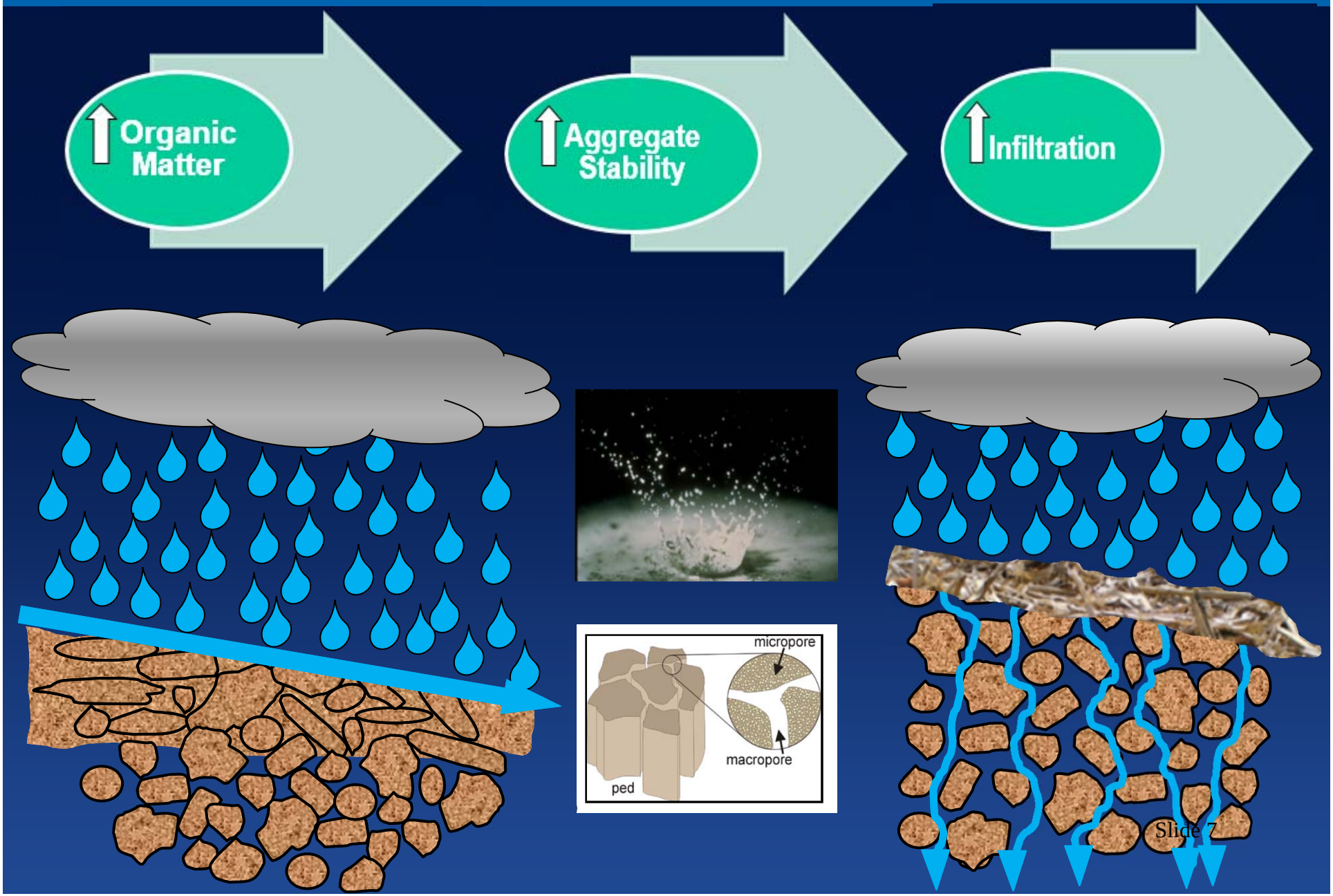
Following a four-inch rain storm event on June 23, 2017, in Gibson County, Indiana.
Photos by Chris Lee (USDA/NRCS)

Conventionally tilled corn, no cover crops

No-till soybeans planted into a cereal rye cover crop following a corn rotation.

United States Department of Agriculture

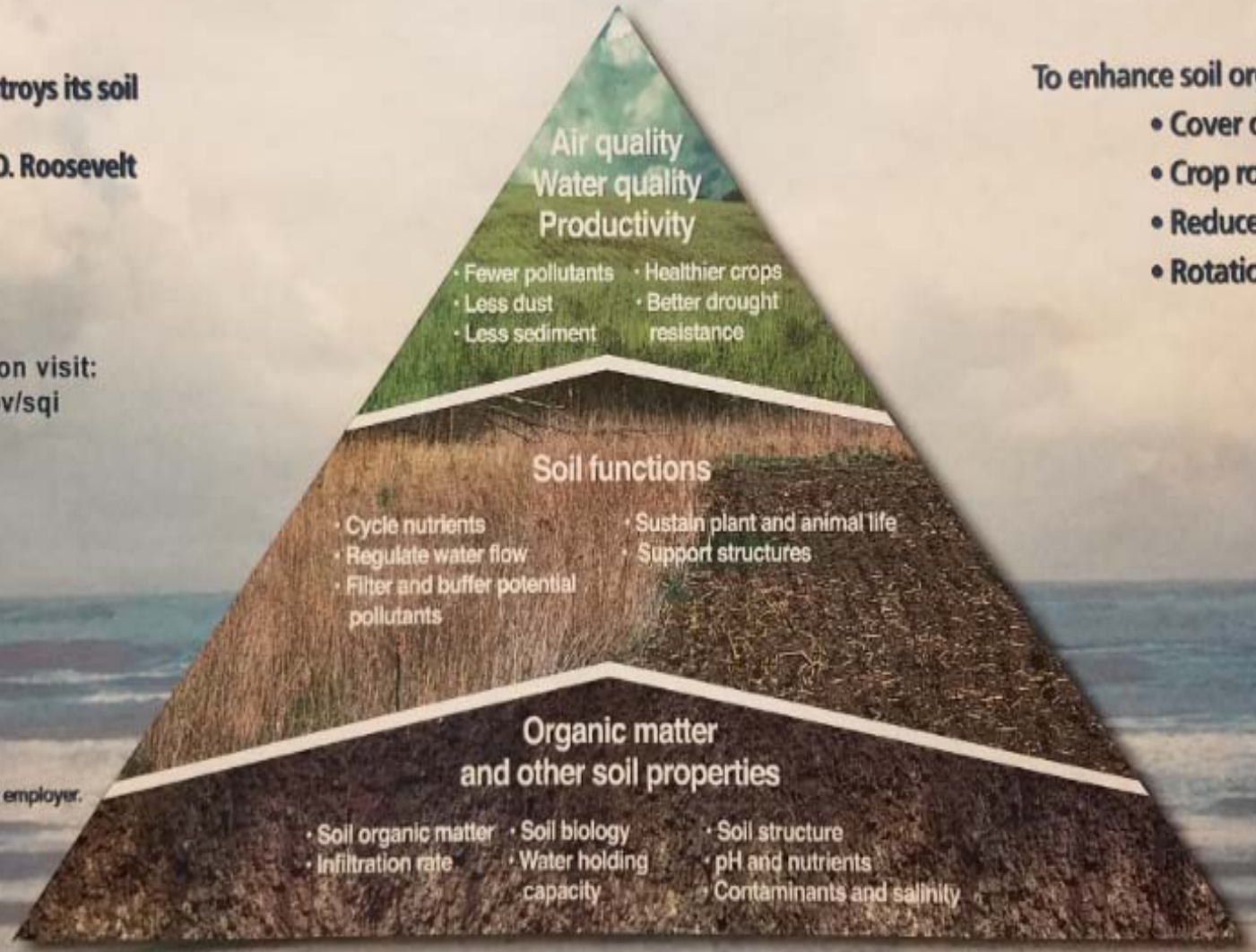

Organic Matter
Aggregate Stability
Infiltration
micropore
macropore
ped

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

Soil Quality
The Foundation of Air and Water Quality

"The nation that destroys its soil destroys itself."
– Franklin D. Roosevelt

For more information visit:
http://soils.usda.gov/sqi



To enhance soil organic matter, use:

- Cover crops
- Crop rotations
- Reduced tillage
- Rotational grazing

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