



# Soil Health and Irrigation Management

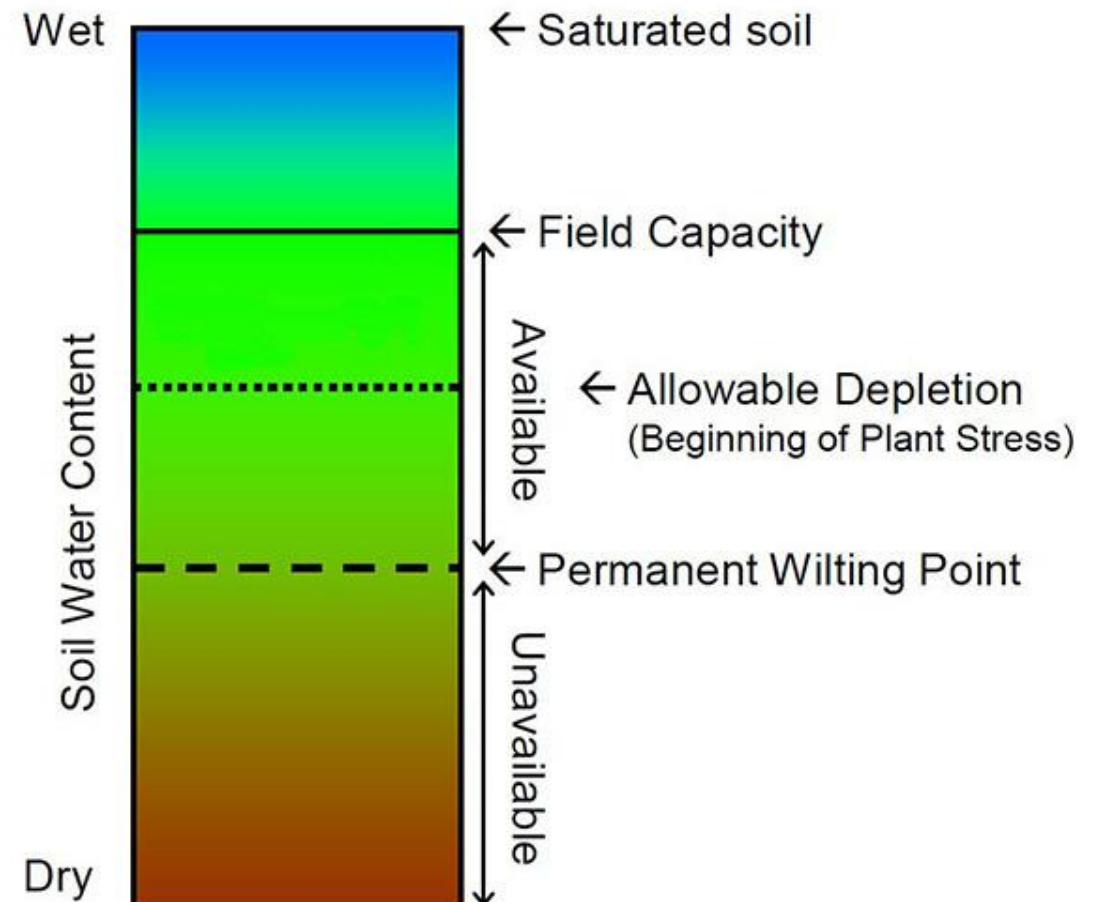
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# How Does Soil Health Impact Irrigation Management?

- ▶ Irrigation Water Management:
  - ▶ Putting Transpired Water Back
  - ▶ What do we need to know about our soils as we irrigate?

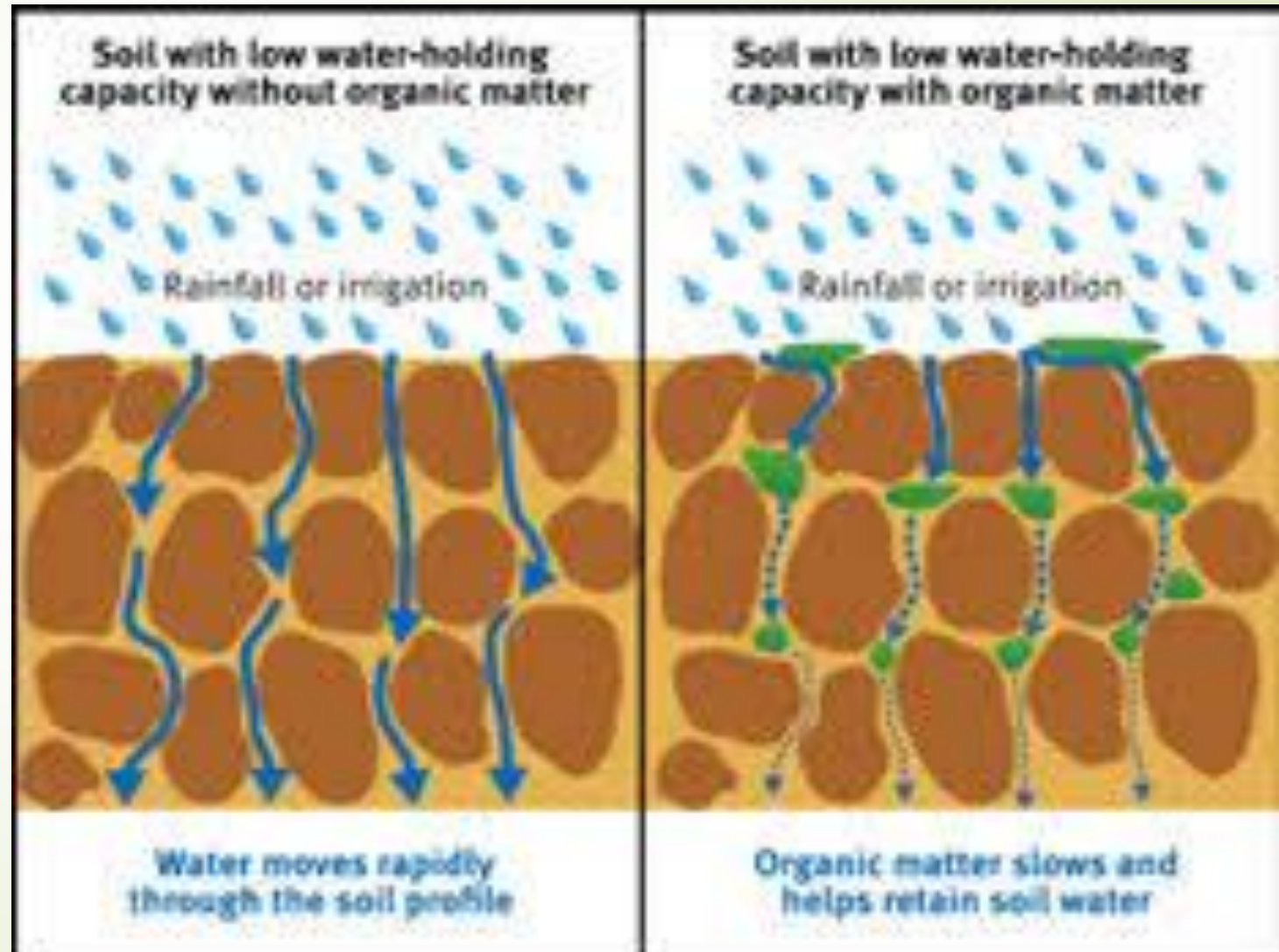


## Soil Water Content



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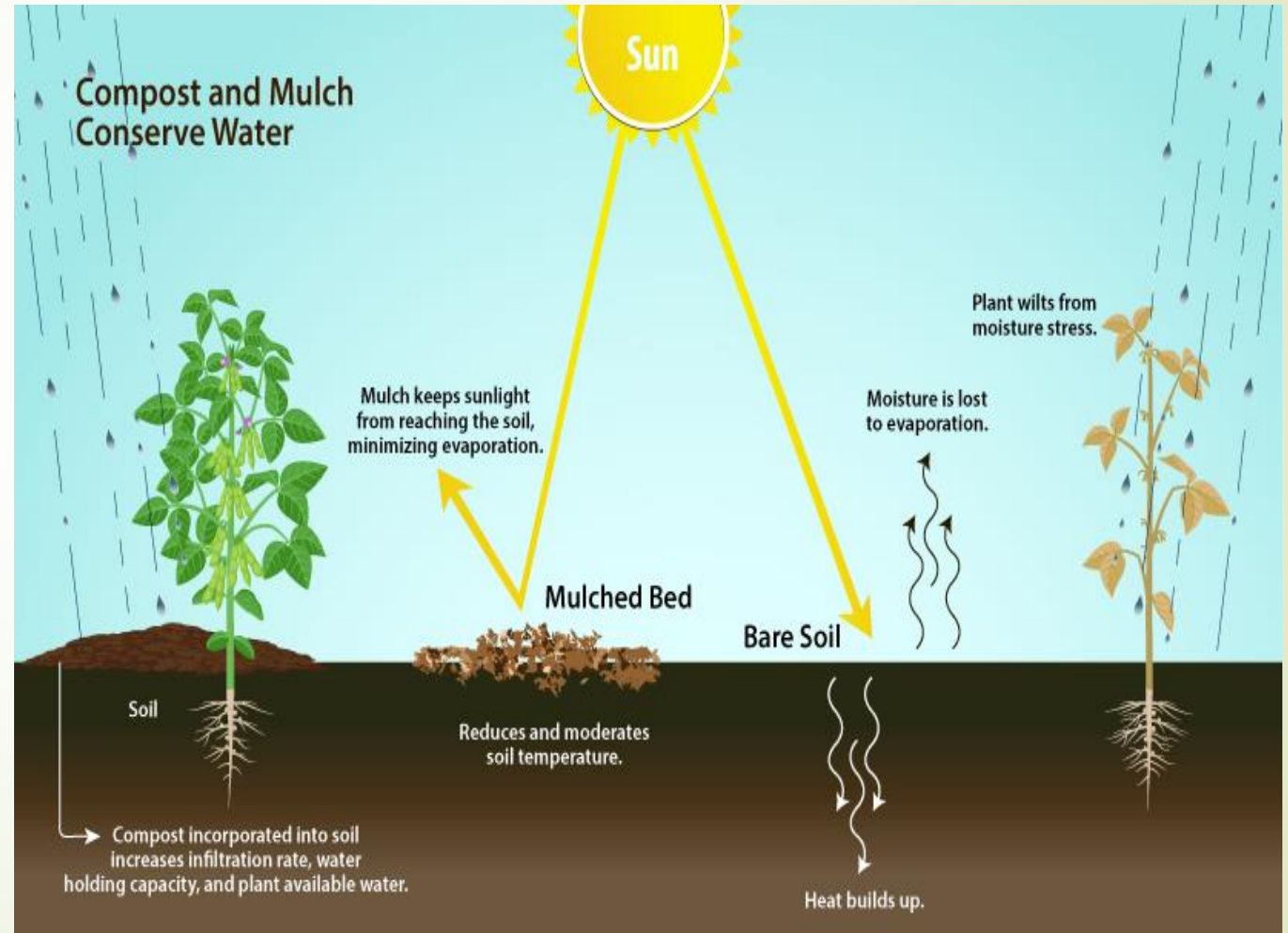
- ▶ Soil organic matter is key to soil's ability to hold water.
- ▶ Typical for our region available water holding capacity (AWHC) is only 1.2" of water in the root zone.
  - ▶ Why? Low organic matter and shallow soils



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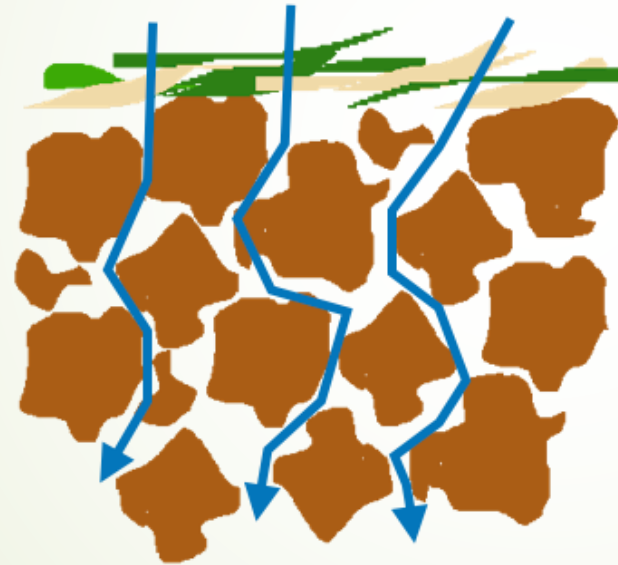
What are the sun's effects on bare soil?

How does mulch change this and improve infiltration?



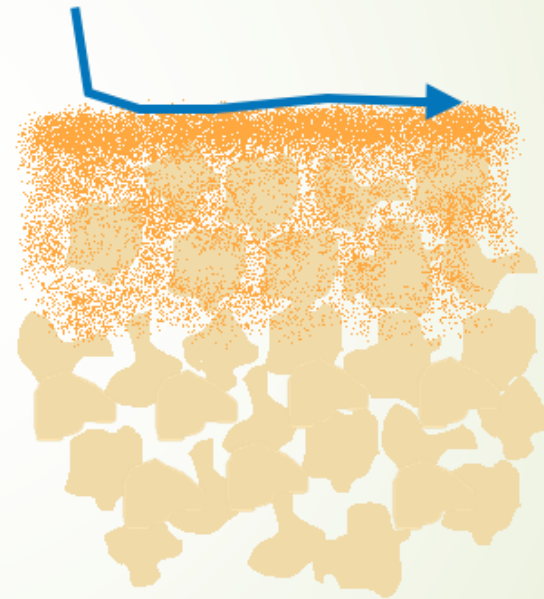
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Figure 1.



## Healthy Soil

- Good structure
- Water infiltration into soil pores
- Slows water velocity
- Dark color
- High organic matter
- Soil surface is covered with dead vegetation



## Degraded Soil

- Weak structure
- No water infiltration soil pores clogged
- Water runs off quickly
- Light color
- Low organic matter
- Soil surface is covered with a soil crust



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Questions?