

Scene setting

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(5 mins)



Types of soil organic carbon

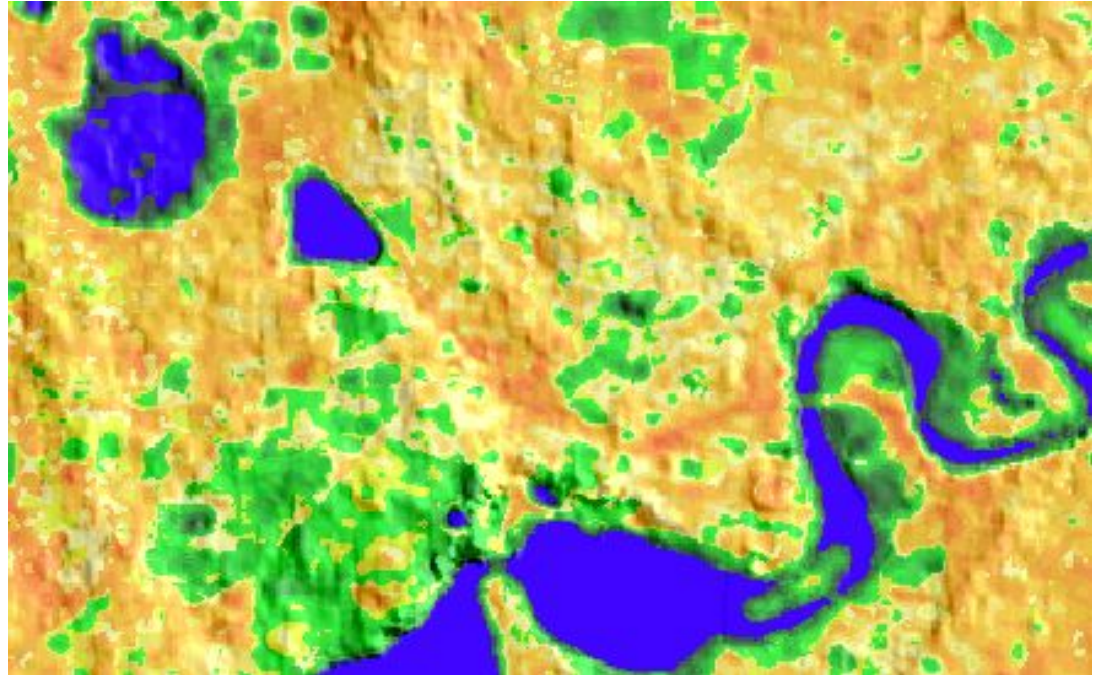
- Charcoal/biochar i.e. resistant carbon lasts in the soil for 100's/1000's of years
- Compost i.e. humus. Can take 10's to 100's of years to degrade.
- Fresh or decomposing organisms including plant and animal matter, microbes i.e. particulate carbon. Can persist for 2 to 50 years



Consequences

- Poorly structured soil
- Low water holding capacity
- Increased water use
- Low fertility
- Low biological activity
- Poor plant growth
- Increased runoff / flooding
- Hotter areas
- Increasingly high levels of inputs required e.g. water, energy, soil amendments plus costs

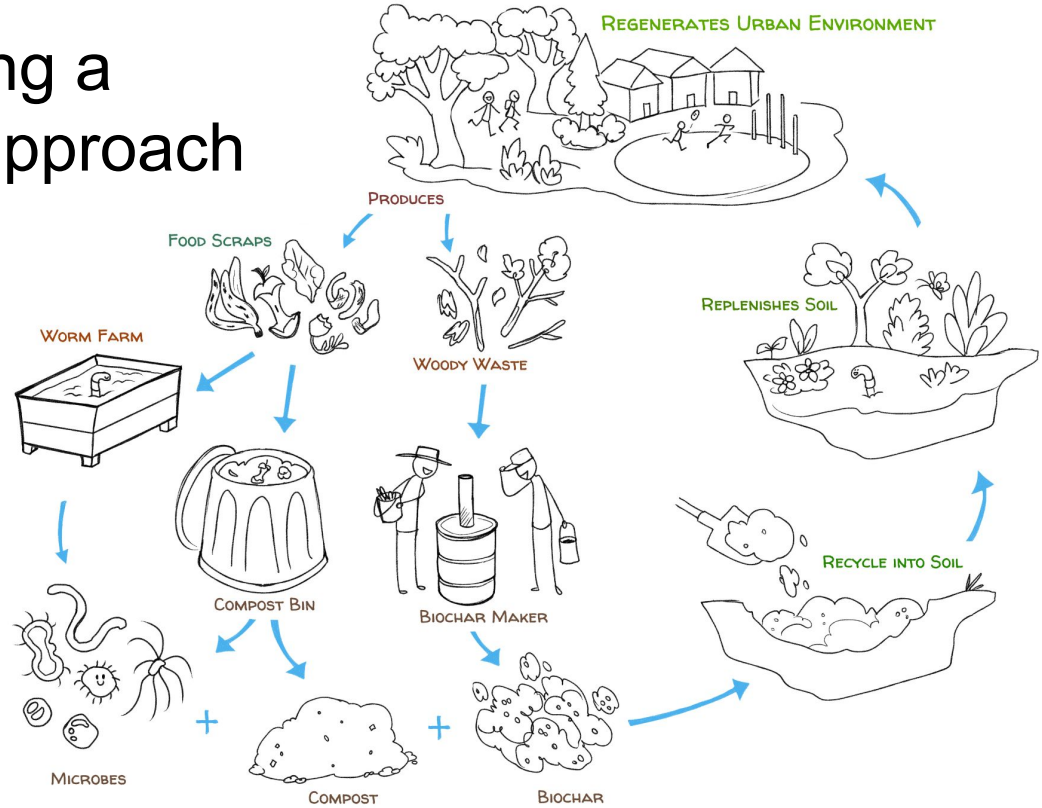
Urban areas are significant sources of carbon emissions as well as carbon for sequestration.



Turning it around by using a regenerative / circular approach

- Refuse
- Replace
- Reduce
- Recycle
- Reuse
- Regenerate

Regenerative urbanism



Benefits

- Carbon is circulated onsite
- Reduced costs
- Cooler living environment
- Healthier and happier

