HUGELKULTURE

[**hoo**-gul-kul-ture]
noun - “Hill culture” in German, or raised bed built from the ground up with woody and compost material topped with soil.

Hugel Beds are a special way to create planting areas for years to come by using available landscape “waste” materials. These beds can:

- Absorb water and nutrients, releasing it slowly as plants need it

  Woody material decomposes over years, hosting beneficial fungi releasing nutrients and improving soil air/water holding capacity

- Reduce or eliminate the need for irrigation by capturing and storing stormwater

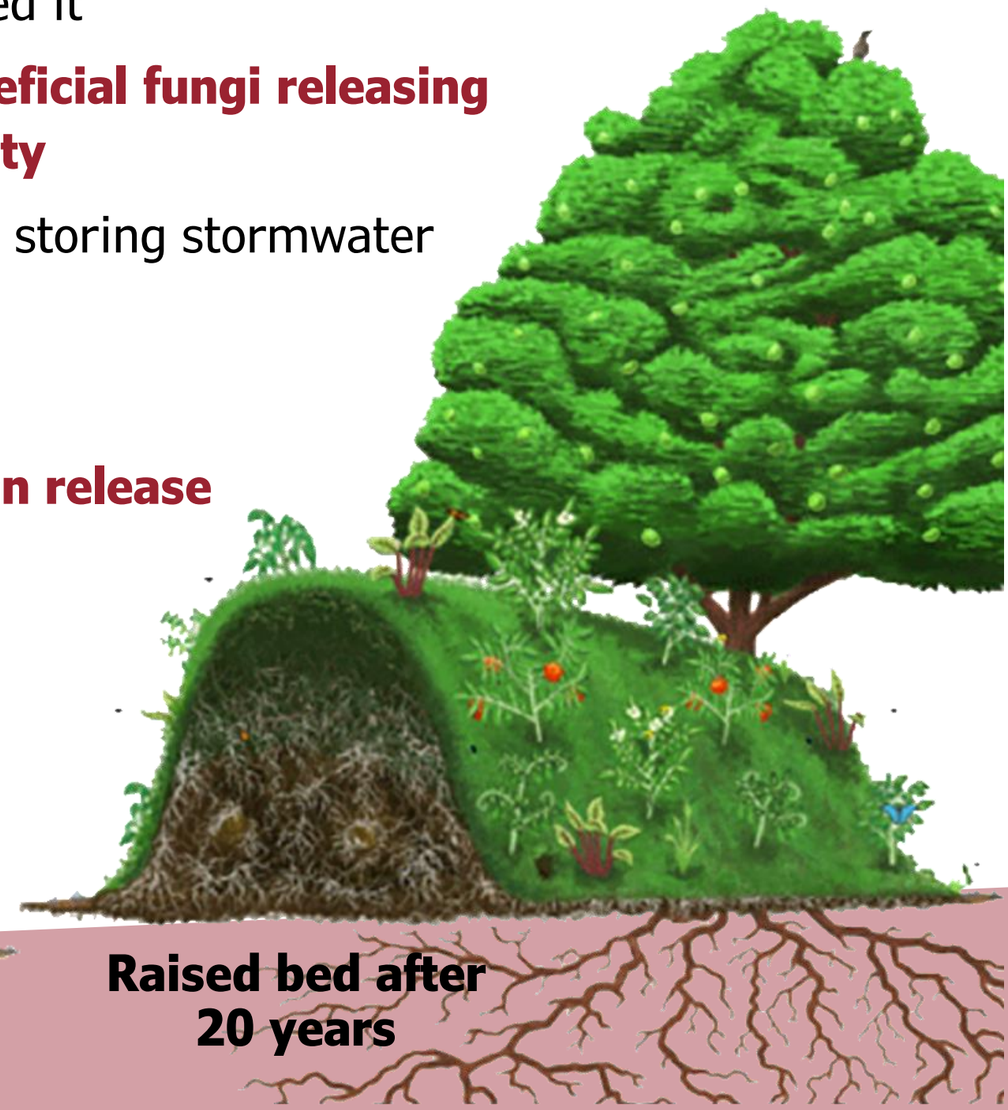
  A 6 foot tall bed can go 6 months without watering

- Plants remove CO2 from the air and store it in the soil

  Deforestation, tilled soil, bare soil, and soil erosion can release CO2 back into the atmosphere

Raised bed after 1 year

Raised bed after 2 years



Raised bed after 20 years

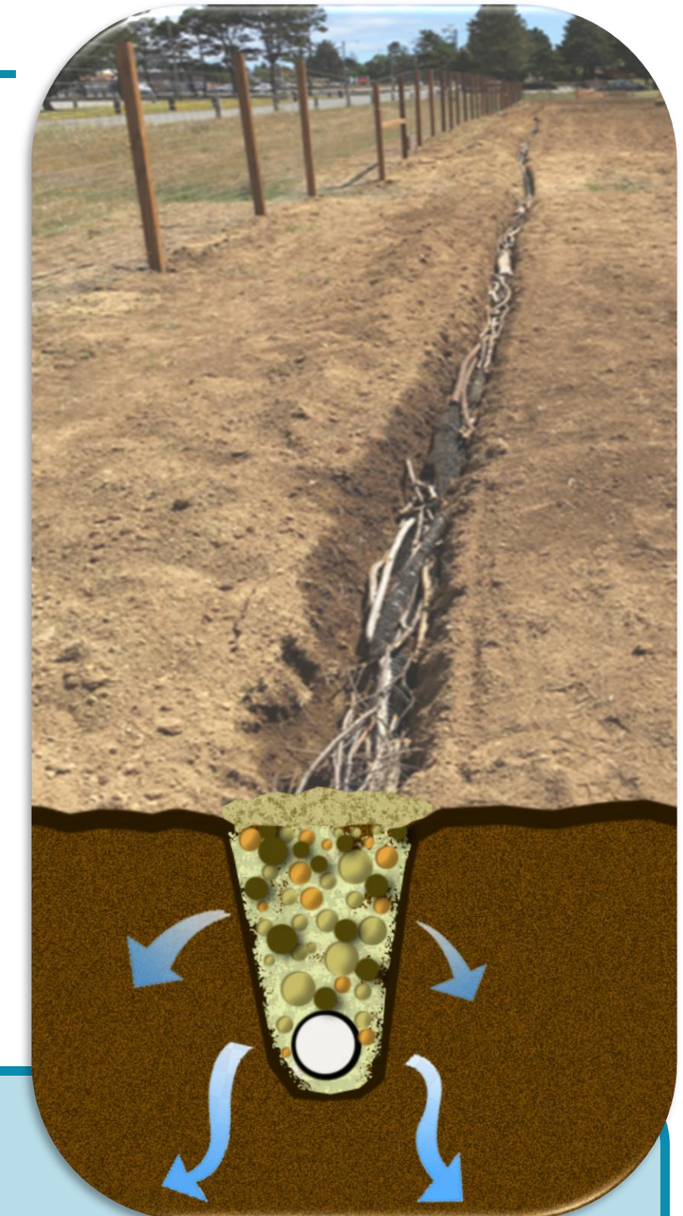
images courtesy Paul Wheaton / RichSoil.com

WATER MANAGEMENT

Rainfall is one of the most important resources for a garden, but it can also present problems of erosion and flooding.

Basic principles for capturing and using rainwater runoff:

- **Slow it** – Organic matter like wood and mulch can slow down the flow of water, reducing its erosive force while capturing and depositing any runoff sediment.
- **Spread it** – By using swales and trenches, we maximize the rainfall absorbed into our soil while diverting excess runoff into unlined ponds. This can hydrate the land and help restore vital low-lying wetlands.
- **Sink it** – When water is allowed to rest, it can filter down and recharge our groundwater and aquifers.



Wood Filled Trenches

These trenches filled with woody debris and optional perforated pipe can catch runoff from hardscape surfaces (e.g. roof, road, rock). Debris is topped with wood chips to form a walking path while holding and wicking water over the summer, recharging groundwater, and forming a fungal network through the decomposing wood that distribute nutrients and water between plants across the site.