

Humans and Nature Working Together

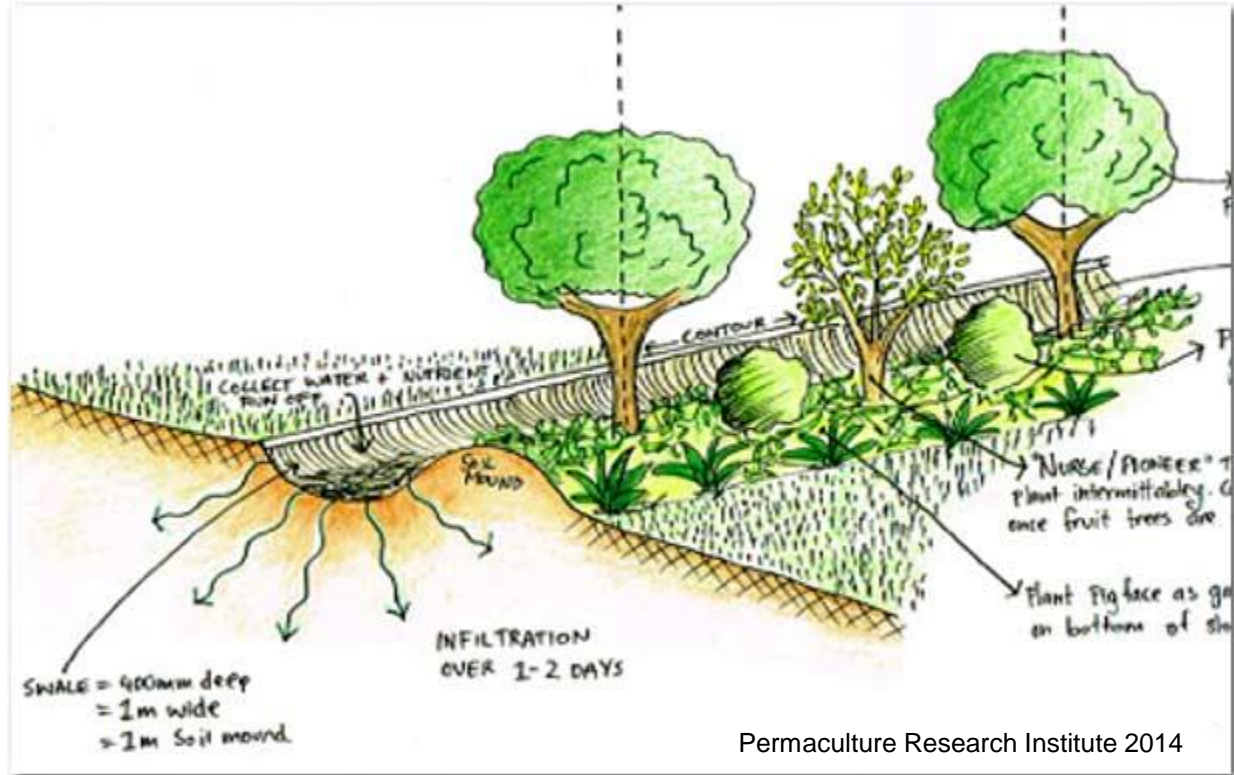


What is a swale on contour?

A water harvesting swale is a trench dug along the land's contour, with a raised mound (berm) on the downhill side created with soil from the trench. All points along a contour line are exactly the same height above sea level.

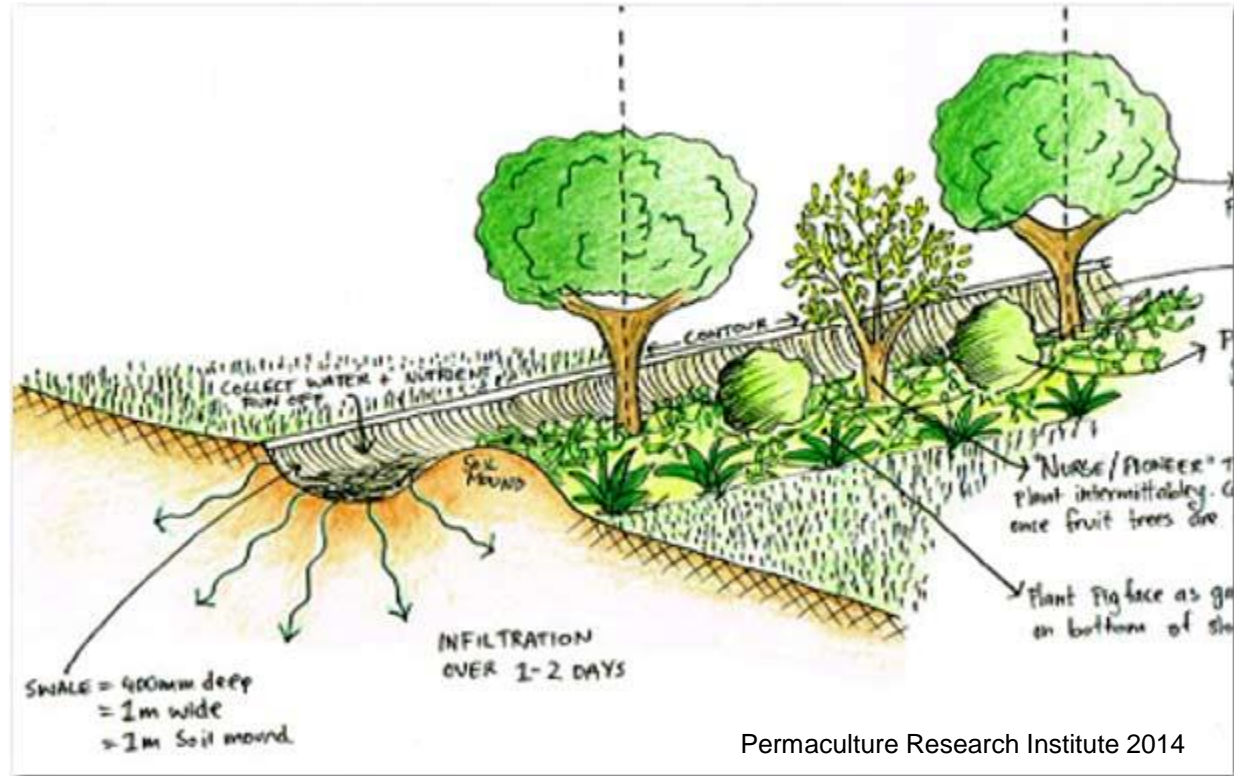
Benefits:

- Increased water infiltration to water table and soil storage
- Increased biomass on mound, within swale and area behind
- Higher organic matter levels in otherwise low organic matter soil
- Helps to protect human infrastructure (roads, houses, etc)



Purpose of landscape scale water harvesting

- Create habitat for wildlife
- Increased biomass can provide quality feed for livestock
- Water infiltration can help recharge water table
- Surface storage features can be used to water cattle, agriculture, and human consumption
- Reduced dependency on well water and dwindling local water tables



N Sandario Rd

N Sandario Rd

S Sandario Rd

S Sa

Civilian Conservation Corps Swales



Google







Google









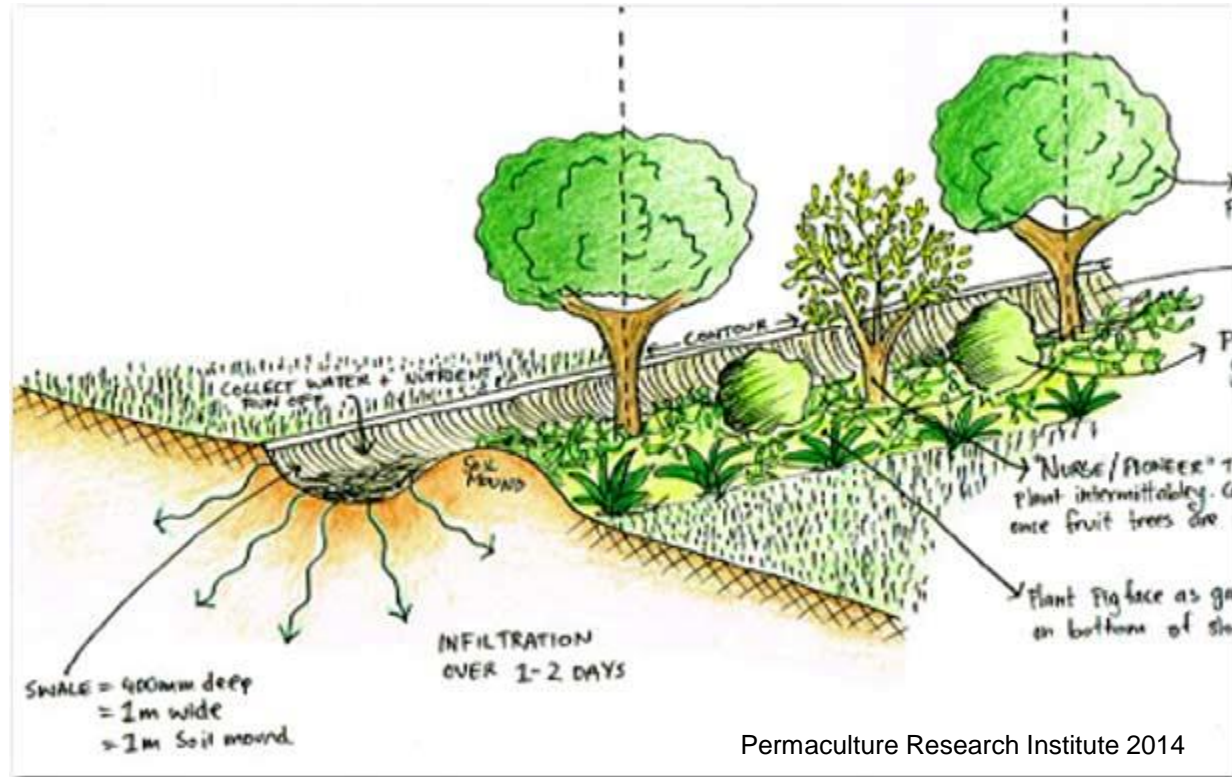


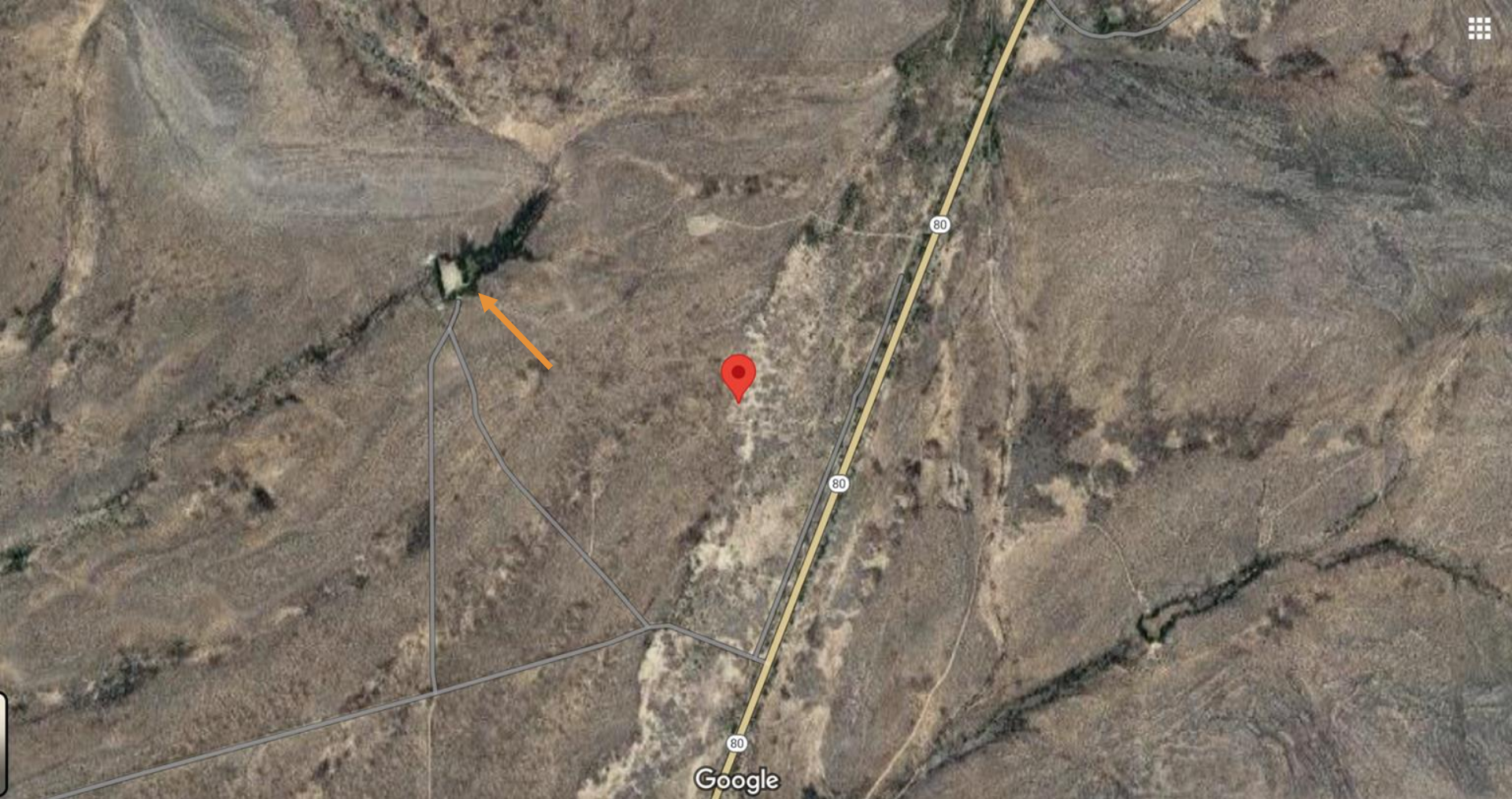


Google

Design considerations for desert rainwater harvesting?

- Larger runoff volumes means larger features (increased width and depth compared to wetter climate features)
- More erosive soils should be addressed with seeding
- Manage cattle especially around pond features to preserve aquatic plant ecology and to prevent overgrazing





Google









Who is doing this now?













What can we do?

- Preserve these features in our planning and development efforts
- Integrate with cattle management to improve soil health and organic matter
- Utilize these features as part of an integrated design plan for human house or settlement purposes
- Remove invasive species to promote native or food productive species
- Consider these water sources for agricultural and other human use



Thank You!

