

# Tree-Talk

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Just Trees

512-467-TREE

# The Dream



# The Reality



# The Reality



# The Reality





Physical  
damage



Physical  
damage



# Grade change





# Grade change



Drainage change

What is wrong with this picture?

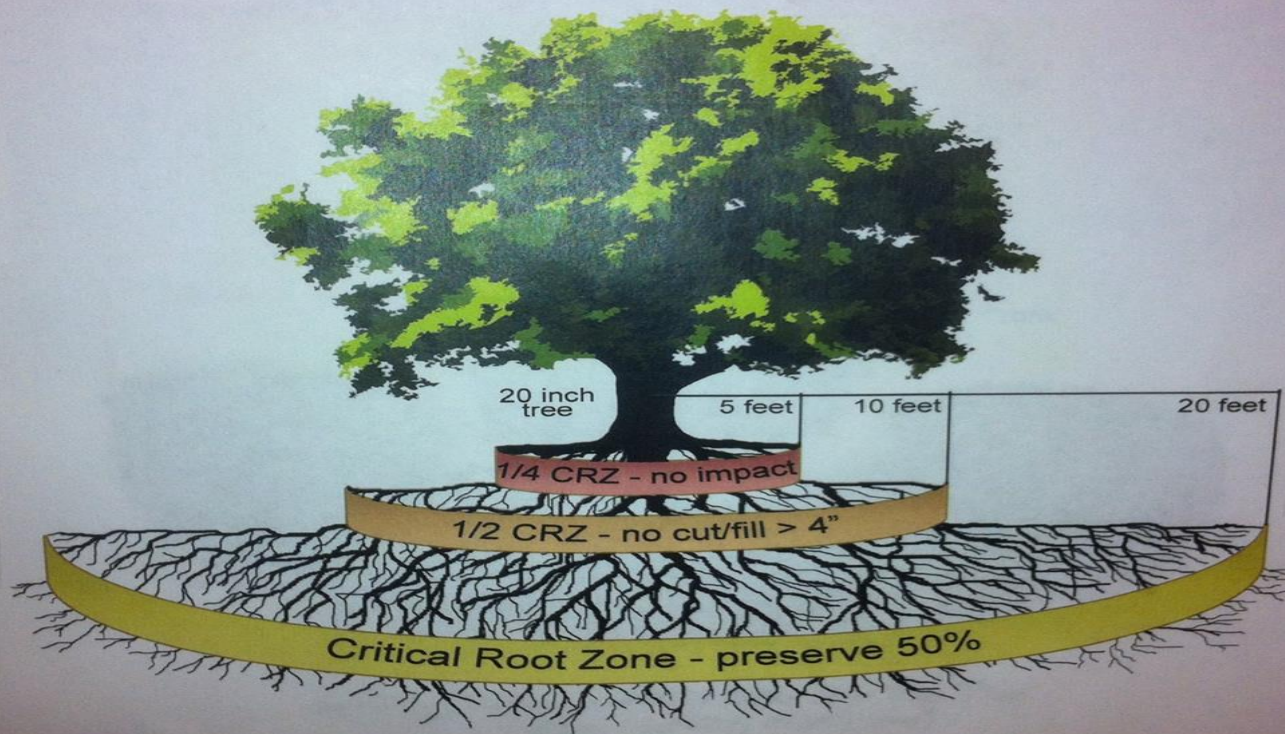


# Compaction:

the process of  
killing soil and  
loosing water.

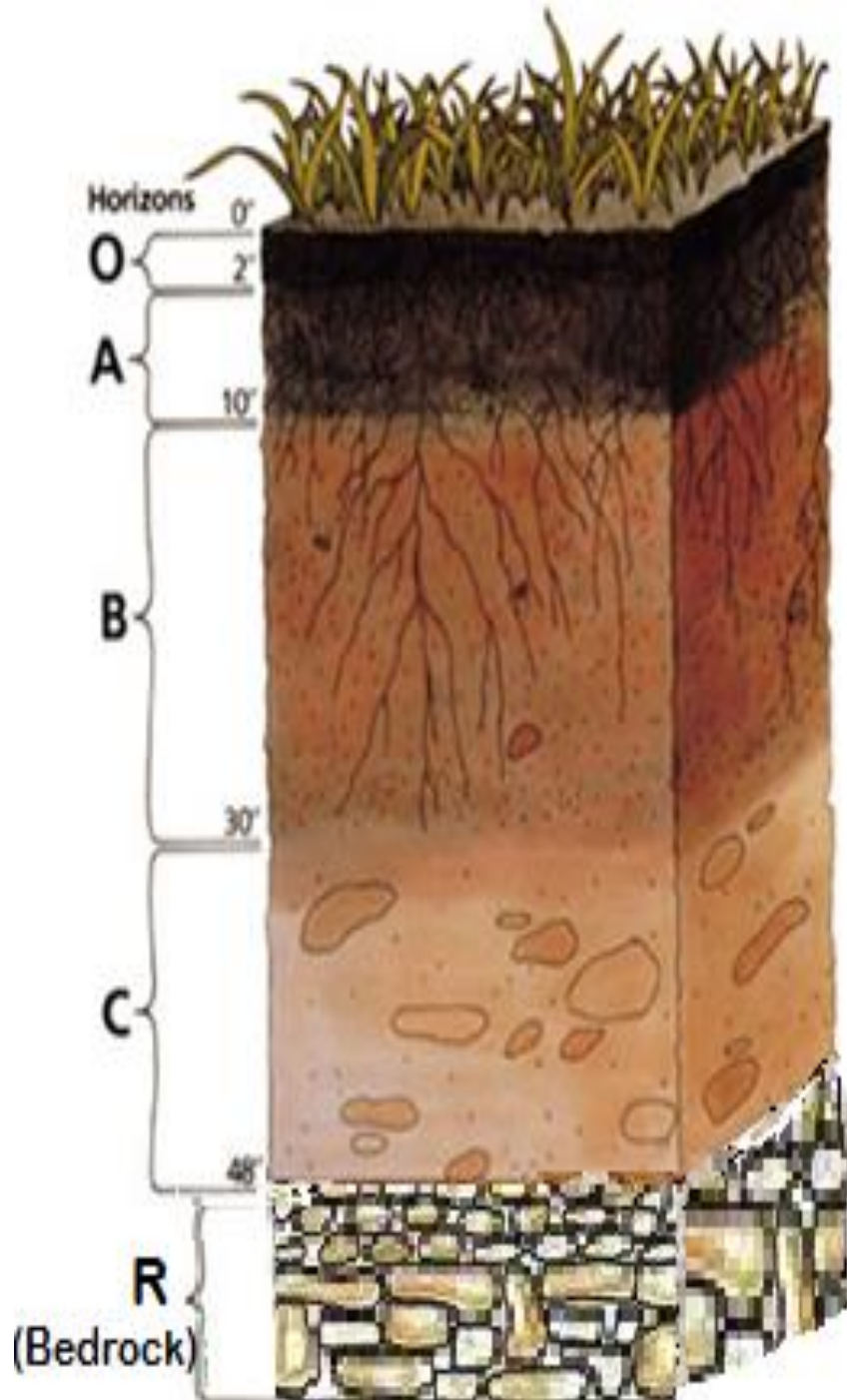


## The Critical Root Zone - Development Impact Zones





Well outside of this full crz  
and yet lots of roots intact at 18  
inches

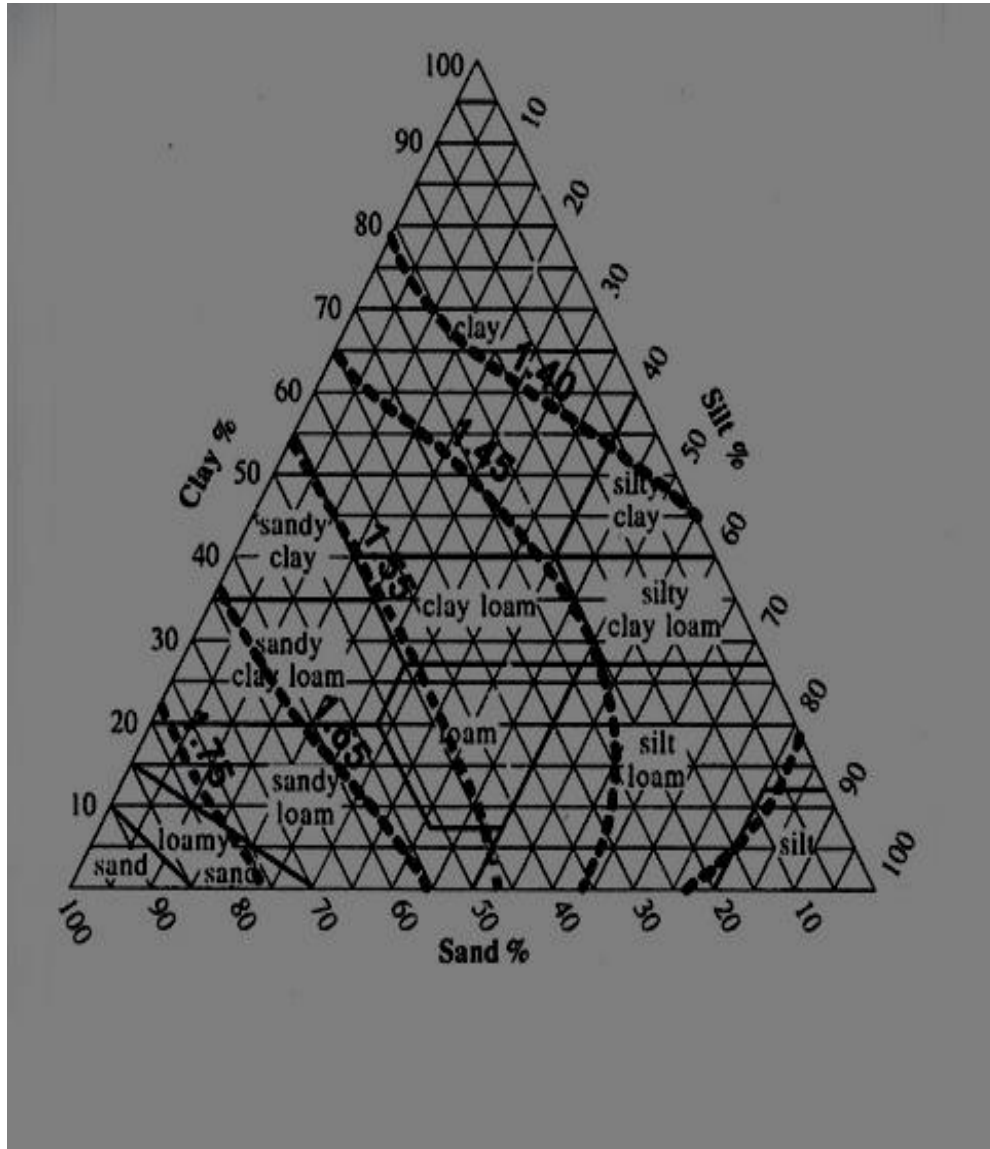


## Soil Profile:

A horizon is the topsoil, where most of the plant activity happens. The rhizosphere is area of contact between plant and soil.



# Soil properties:



.Texture: particle sizes. Clay-silt-sand-Gravel

.Structure: bonding of particles. Clay soils are strong. Sandy soils are weak.

.Density: degree to which particles are packed together. Bulk density is the measure of compaction of a soil.

.Water movement: speed at which water moves in response to capillarity and gravity.

.Nutrient holding capacity: clay holds better than sand.

.Temperature: 75F is ideal. Nitrification slows above 85 and roots are damaged at 95 and above.

.Organic activity: **rhyzosphere**, the last frontier

# Soil Remediation Techniques: Airspade



# Air-tilling, composting, mulching, watering





.Remember CRZ and soil volume

.Mulch can shed water....

.Mulch needs to be “fluffy”

## Deep root hydraulic injection

























