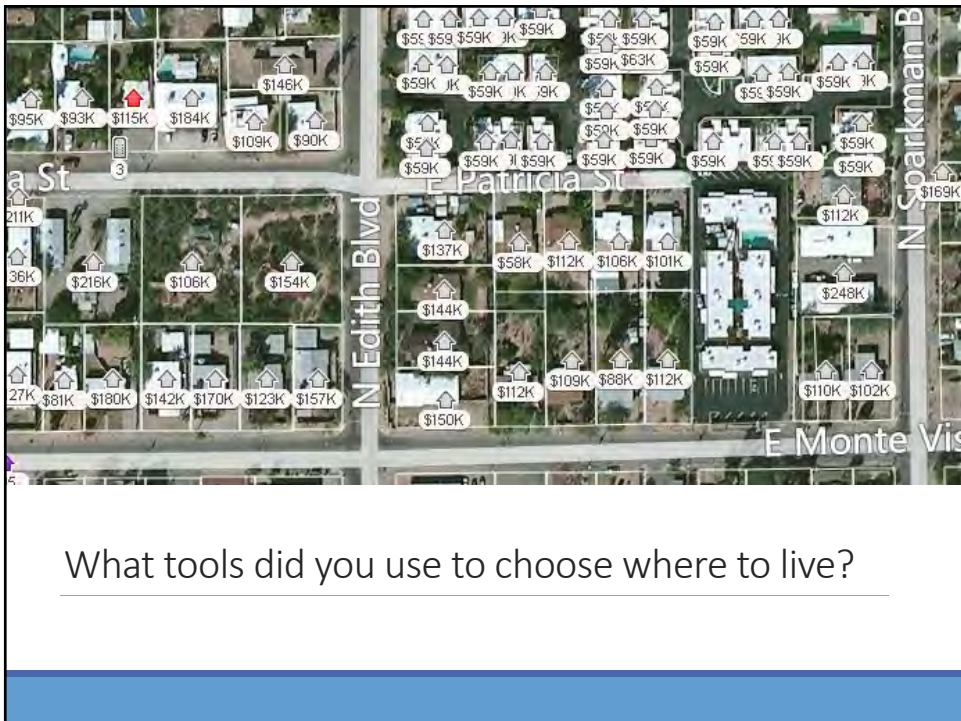




1



2

NEIGHBORHOOD SCOUT | Enterprise-grade data for every neighborhood and city in the U.S. My Places My Searches Buy or Sell a Home

Get crime, school & real estate reports for any address:  
Enter any address, city or state SCOUT NOW

Home > AZ > Scottsdale Real Estate > Public School Ratings

### Scottsdale, AZ Public Schools

SHARE: [Social Media Icons]

Save this place ★  
Send to a friend →

See Homes for Sale Here

OVERVIEW PUBLIC SCHOOLS APPRECIATION RATES CRIME RATES

DATA DESCRIPTION FIND A REAL ESTATE AGENT

Best Scottsdale Neighborhoods for Education

- 1 Tortilla Flat / Horse Mesa
- 2 Desert Highlands
- 3 N Pima Rd / E Dynamite Blvd
- 4 E Carefree Hwy / Tom Darling
- 5 Reata Pass
- 6 Rio Verde
- 7 Scottsdale Rd / E Morning Vista

Scottsdale Homes for Sale

FIND HOMES

Did you check out the neighborhood?

3

VISIT PHOENIX Meeting Planners Travel Professionals Media Members

Search Phoenix go

ABOUT PHOENIX THINGS TO DO PLACES TO STAY WHERE TO EAT EVENTS SPECIAL OFFERS

Home > Things To Do > Member Details

### Phoenix Mountain Preserve

SHARE [Social Media Icons] Print Back to Previous Page Like 17

1431 E. Dunlap Ave.  
Phoenix, AZ 85020

Map It

Phone: 602 943-2656  
Visit website

+ My Trip Planner

Phoenix Mountain Park and Recreation Area and Dreamy Draw Recreation Area is located just north of Glendale Ave and 74th Street in Phoenix. Although surrounded by civilization, Phoenix Mountain Park and Recreation

Did you consider quality of life aspects?

4



Did you consider curb appeal?

5

**Eastern Maricopa and Northern Pinal Counties Area, Arizona**

**LaA—Laveen loam, 0 to 1 percent slopes**

**Map Unit Setting**  
 National map unit symbol: 1494  
 Elevation: 1,100 to 1,700 feet  
 Mean annual precipitation: 8 to 9 inches  
 Mean annual air temperature: 72 to 74 degrees F  
 Frost-free period: 240 to 300 days  
 Farnwood classification: These terms and if required.

**Map Unit Composition**  
 Laveen and similar soils: 100 percent  
 Estimates are based on observations, descriptions, and extracts of the manual.

**Description of Laveen**

**Setting**  
 Landform: Alluvial fans, stream terraces  
 Landform position (two-dimensional): Terminal  
 Landform position (three-dimensional): Topset  
 Downslope shape: Convex  
 Across-slope shape: Convex  
 Parent material: Mixed alluvium

**Typical profile**  
 Ap - 0 to 14 inches: loam  
 Bk - 14 to 60 inches: loam

**Properties and qualities**  
 Slope: 0 to 1 percent  
 Depth to restrictive feature: More than 60 inches  
 Natural drainage class: Well drained  
 Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.25 to 1.00 inch)  
 Depth to water table: More than 60 inches  
 Frequency of flooding: None  
 Frequency of ponding: None  
 Calcium carbonate, maximum in profile: 30 percent  
 Salinity, maximum in profile: Very slightly saline to slightly saline (2.0 to 4.0 millimhos/cm)  
 Available water storage in profile: High (about 10.2 inches)

**Interpretive groups**  
 Land capability classification (irrigated): 1  
 Land capability classification (nonirrigated): 7c  
 Hydrologic Soil Group: B  
 Hydraulic rating: No

Research soil characteristics?

[HTTP://WEBSOILSURVEY.SC.EGOV.USDA.GOV](http://websoilsurvey.sc.egov.usda.gov)

6

3



Conduct a percolation test to measure drainage?

7



Clay layer – water clears  
Silt layer – 2 hours  
Sand layers – 1 minute

Image source: diy.org and ext.colostate.edu

Sample the soil texture?

8

This man did!



Don Breckenfeld, Retired soil scientist – now urban farmer along the Santa Cruz River historic floodplain

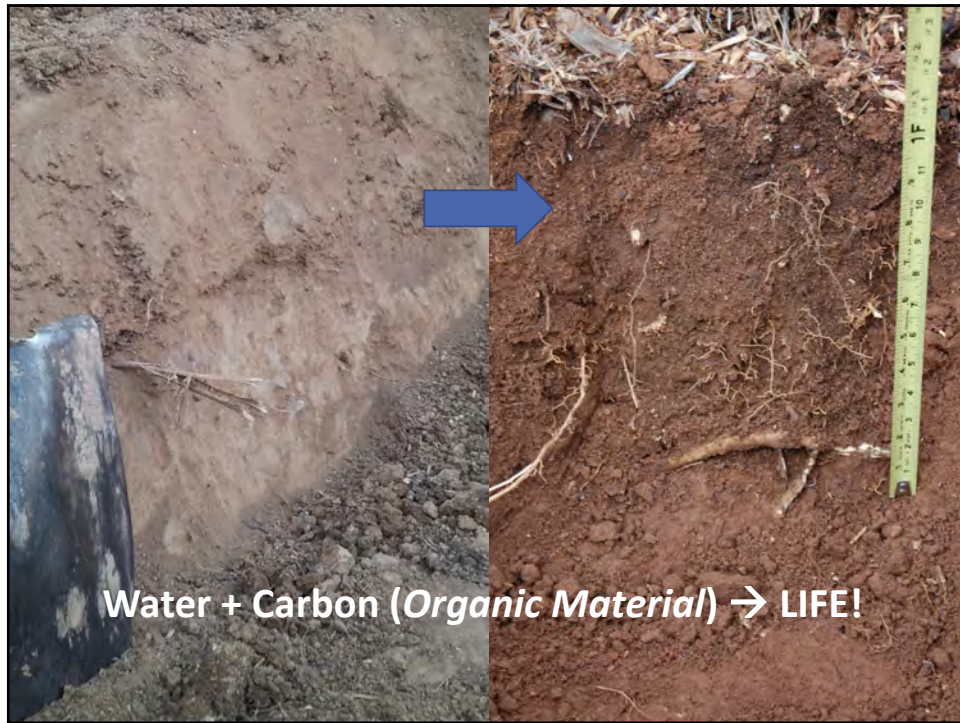
9

Unfortunately, I did not either...

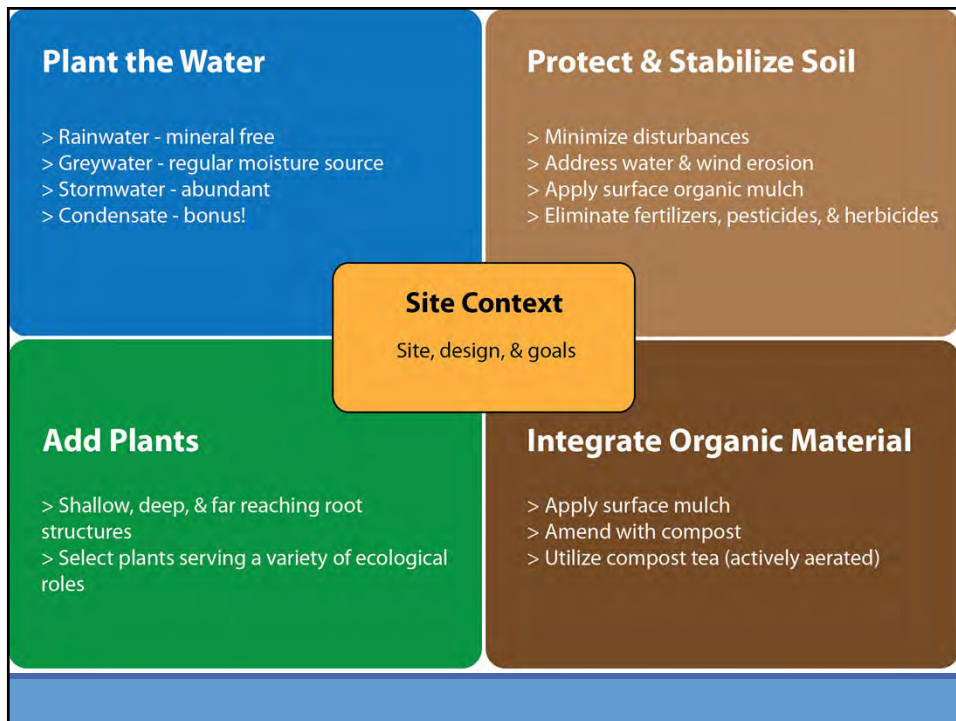
However, there is hope to invest in your soil and begin the transformation as I did.



10



11



12



13



14



Our typical starting point: Hot or flooded  
Lack of integration with water and landscape resources...

15



...and soil degrading maintenance practices

16



A choice:

**Resource Scarcity** ? or **Resource Abundance**?



17

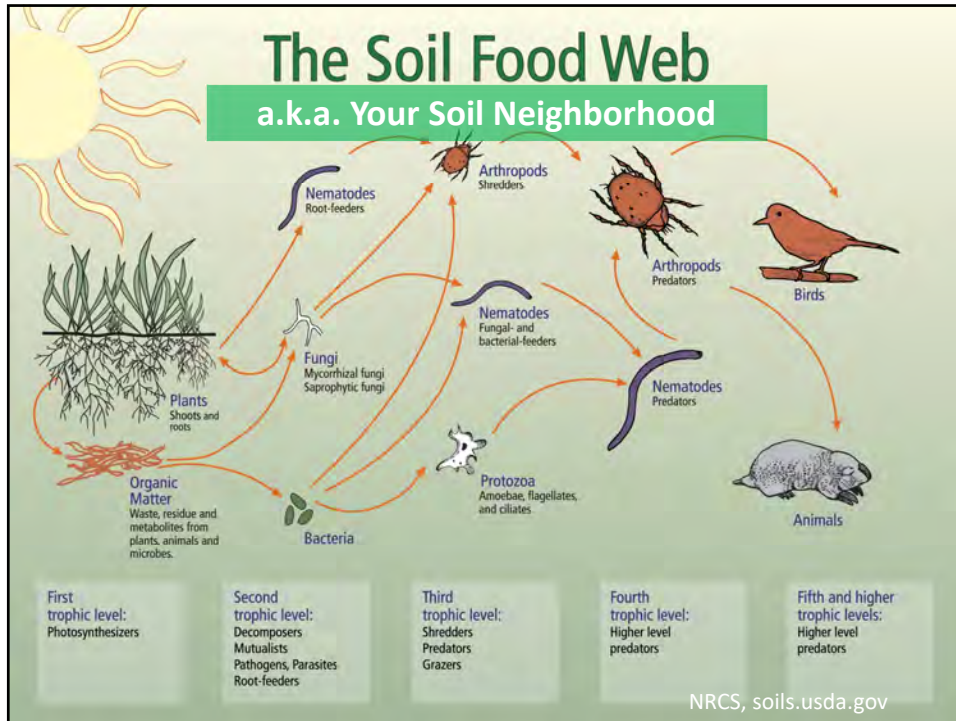
What resources do you produce to build your soil fertility?



List your resources:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

18



19

Let's Set the Healthy Soil Stage!

---

So, we live in a desert.  
There is not enough water. Right?

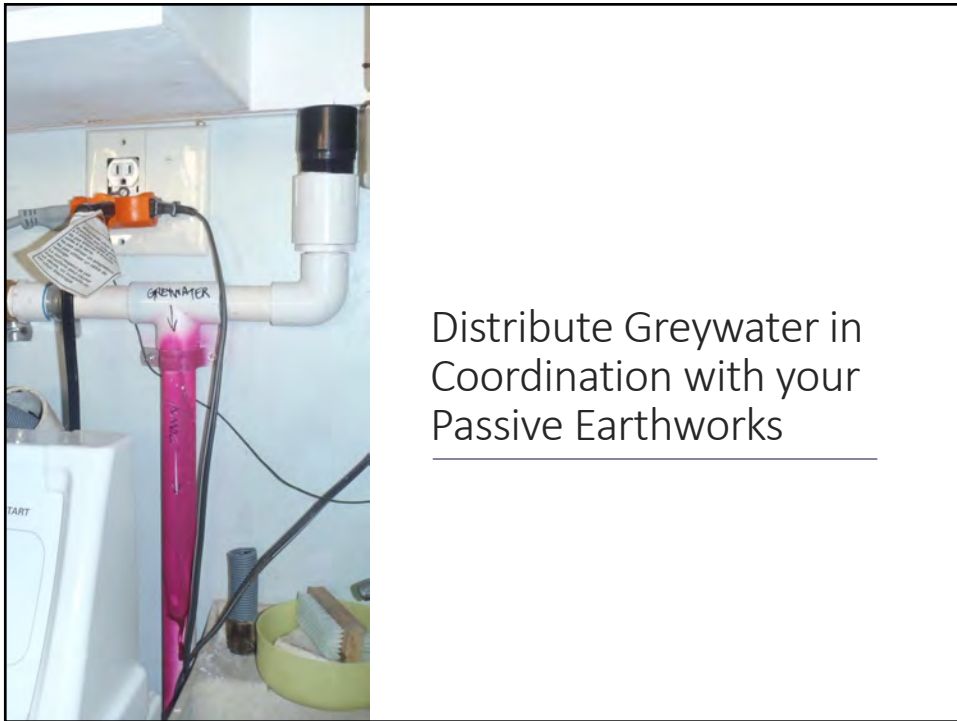
**WRONG!**

Each 1000sq.ft of roof area = 4,800 gal/year

20



21



Distribute Greywater in  
Coordination with your  
Passive Earthworks

22



23



Infiltration chambers used for sub-surface kitchen sink greywater discharge

24



25

Why do we continue to let runoff be a problem?

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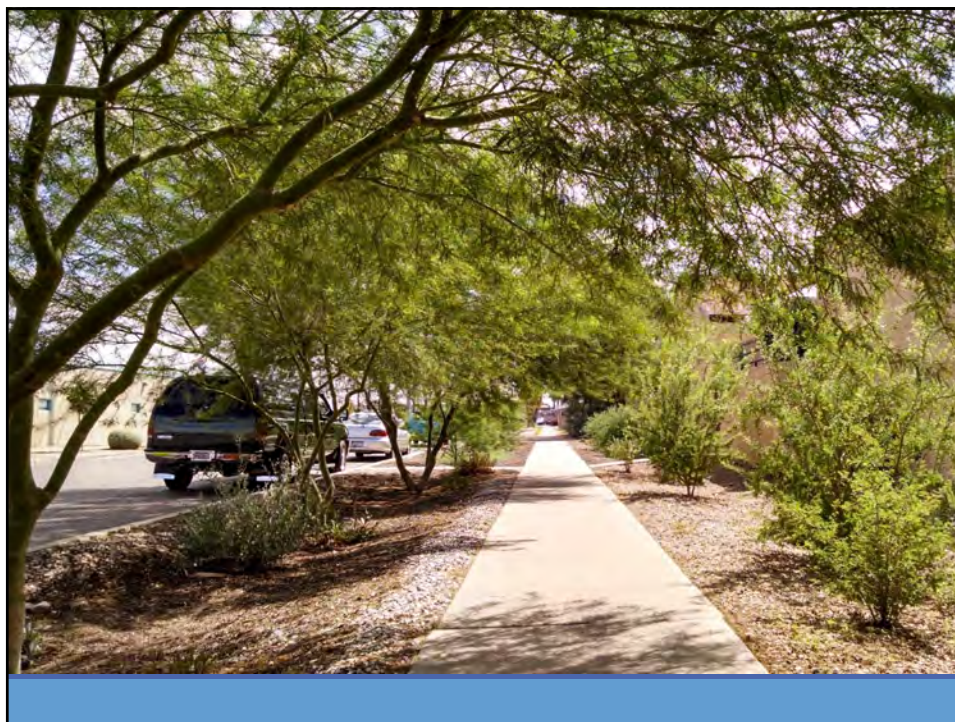
26



27



28



29

## Let's Set the Healthy Soil Stage!

---

So, we live in a desert.

Deserts have limited organic material. And, organic mulch does not benefit native plants. Right?

**WRONG!**

People concentrate organic waste resources and even produce organic resources.

Native plants in undisturbed desert areas produce their own mulch.

30



31



32



Promote fungi for perennial plants



33

Integration of mulch into topsoil!



34

Promote bacteria for vegetables and annuals.



35

The shredders!



36



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Food scraps and smaller plant trimmings:

- Can provide residential needs for soil compost amendments
- Average person generates ~1.35 pounds of organic waste per day. That equals ~500 pounds per person every year!

37



Backyard  
compost pile  
integrated into  
chicken coop

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38

Hens hard at work



39



40

Amazing compost for vegetables!



41



42

## Now, Let's talk about manure!

Earthworm castings

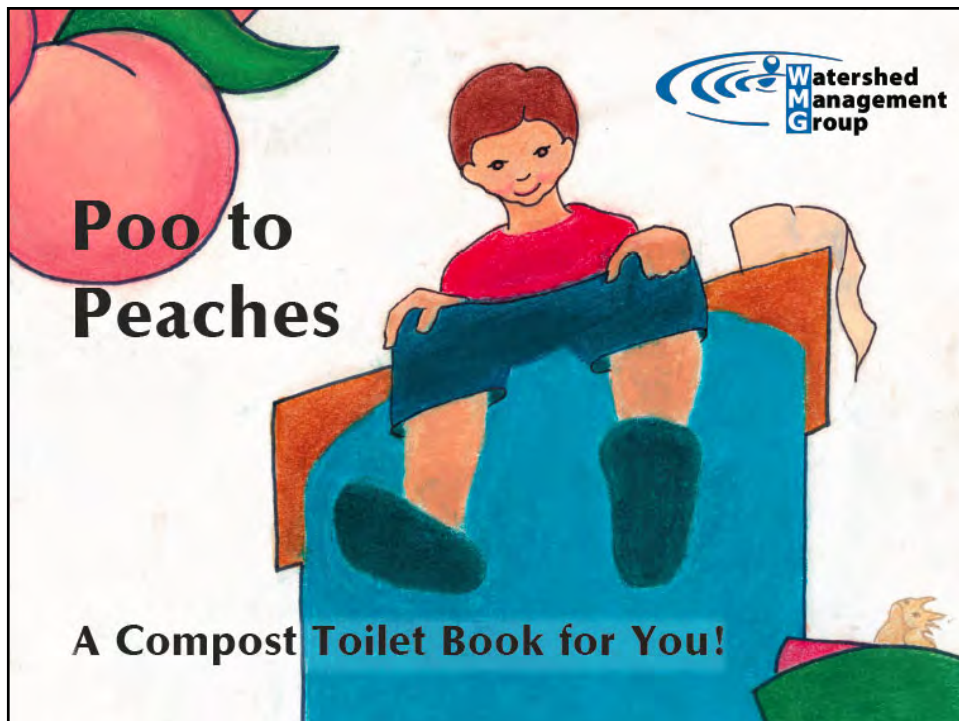
Farm animal manures: horses, cows, goats, etc.

Chicken manure


And....Humanure!



43



44




**How to manage a site-built composting toilet:**

**Aerate** - use a compost crank or something similar to add oxygen to the composting pile. Be sure to start with the oldest aging barrel/chamber first and then the most fresh barrel/chamber last.

**Check the moisture** - use a squirt bottle (or watering can) to add water and maintain sufficient moisture for the composting process (especially in dry climates). The compost should appear damp but not be soaking.

**Monitor temperature** - the 'aging' (inactive barrel/chamber) composting pile should maintain a temperature of at least 80°F for 1 month.



16

45

## Guide to Healthy Desert Soils

1. Observe landscape and site interactions regarding use, water flow, and soil
2. Promote infiltration and absorption of water
3. Integrate living and dead organic material
4. Minimize soil disturbing maintenance practices
5. Make appropriate use of on-site and local "waste" streams as soil building resources
6. Continue to promote soil building processes

25

46

## Can you add any more resources to your list to build your soil fertility?

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- ✓ Rainwater
- ✓ Greywater
- ✓ Stormwater
- ✓ Tree trimmings
- ✓ Food scraps
- ✓ Chicken manure
- ✓ Humanure
- ✓ Earthworm manure
- ✓ Urine

**...And your creative capacity!**

47

## Instructions for Project review

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What Soil Resources do you have?

- Review Soil Resources List, page 1 of handout

Soil Enhancement Planning

- Handout on page 1
- Areas
- Needs
- Best practices to employ

48



# Questions?

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49

# Thank You!!!



Phoenix Green Living Co-op Project 10/12/2013

50