

Model Decentralized Wastewater Practitioner Curriculum

SOILS 100 **Getting the Dirt on Soils** **Suggested Course Materials**

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February 2005

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Soils 100

Suggested Course Materials

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SOILS 100

Agenda

Time	Description	Instructor
845-900	Welcome Introductions-Why is knowing about the soil important to you? Objectives Schedule Instructors	
900-930	What is a Soil? Definitions Parts of a soil body Factors of formation	
930-1030	Factors of soil formation Time Climate Vegetation Anthropogenic Parent Materials Topography (Use other methods to discuss soil genesis)	
1030-1045	Break	
1045-1200	Describing a soil Color Texture Structure Horizons	
1200-1245	Lunch and discussion	
1245-200	Soil Description (cont.)	
200-245	NRCS County Soil Survey What is it? Development Use Application to On-site Wastewater	

245-300 Break

300-500 Field exercises
Texture
Structure
Consistence
Profile description
Ground truth
Map scales

SOILS 100

Overview

This one-day course introduces the concepts of soils and how they occur in the field to participants. Topics covered include the observable field characteristics of soils that are described in a morphological description and an appreciation for how these characteristics can influence water movement and wastewater treatment in soils. Participants get an appreciation for the basics of field morphology such as soil texture, structure, color and consistence.

SOILS 100

Goals

1. Participants will gain a working knowledge of the soil properties relating to On-site Wastewater site evaluations.

Learning Objectives

2. Participants will learn the basics of how to identify and describe soil morphological features such as color, texture, structure and consistence in the field and recognize their importance to septic systems.
3. Participants will be introduced to how soil morphological description skills are applied to a typical land use question – land suitability for an on-site wastewater treatment system

Prerequisites

Prior to attending Soils 100, participants are expected to:

1. Have already been introduced to the concept of wastewater treatment in soils

Soils 100 – Getting the Dirt on Soils

Evaluation Form

Name (optional): _____

With a rating scale of 1 (Disagree) to 5 (Agree), please respond to the following questions

Review of printed materials:

	Disagree					Agree				
The text completely covers the topic area.	1	2	3	4	5					
The visuals completely cover the topic area.	1	2	3	4	5					
The discussion notes completely cover the topic area.	1	2	3	4	5					

Review of learning objectives:

I gained a better understanding of why soils are important.	1	2	3	4	5
I gained a better understanding of what soils are.	1	2	3	4	5
I gained a better understanding of how soils form.	1	2	3	4	5
I gained a better understanding of how to describe soils.	1	2	3	4	5
I gained a better understanding of how to interpret soil data.	1	2	3	4	5
I gained a better understanding of how soils are involved in wastewater treatment.	1	2	3	4	5

What specific recommendations would you provide for the text.

What specific recommendations would you provide for the visuals.

What specific recommendations would you provide for the notes.

Please give specific positive comments on the topic/module.

Problem Sets

None

Additional Materials

Munsell Color Books

Augers

Tape Measures

Several texture samples

County Soil Survey

Soil Monoliths or Cores

Soil Pits (field)