

SOIL SURVEY

6



OBJECTIVES

The purpose of this chapter is . . .

- To understand the information that is presented in a soil survey.
- To know how to use the soil survey as a reference guide.
- To know the different soil survey formats.
- To recognize that soil series names are given to soils with similar characteristics.
- To learn how to apply local soil information to onlot sewage disposal evaluations.

The Soil Survey as a Reference Guide

- Soil survey maps display the projected soil conditions in a specific area. Corresponding soil series names and descriptions of the associated soil characteristics are included in the soil survey text.
- You should become familiar with the soil survey resource for the county or counties in which you are permitting systems.
- You should review the survey data and become familiar with the soil characteristics, prior to any site visit.
- Understand what soil conditions may present challenges with regard to individual onlot sewage treatment systems.



What soil conditions might be identified in a soil survey that would impact the suitability of a site for an onlot sewage system?

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- _____
- _____
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LOCATE A SITE ON A SOIL SURVEY MAP

Before you conduct any site testing on a proposed site, look up the site in a soil survey. Find the soil series that you anticipate encountering on the site, and review the corresponding characteristics for the soils.

SOIL SURVEY FORMATS

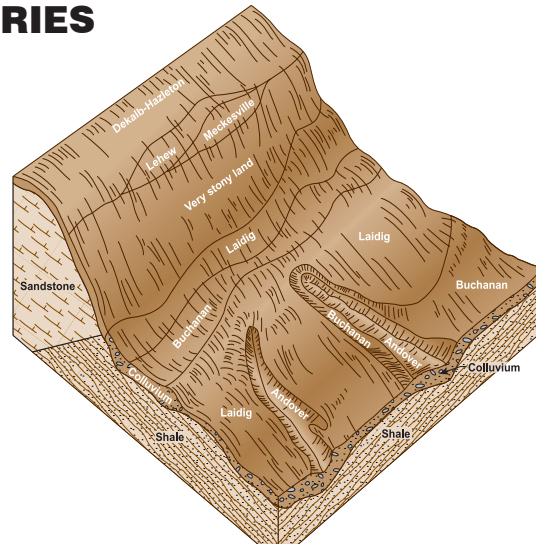
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HOW TO OBTAIN SOIL SURVEYS

Soil survey maps are available for each county in Pennsylvania. Not all formats are available for each county.

- ✓ To obtain information on the available resources, contact the local USDA Natural Resources Conservation Service (NRCS) office. (Page I-C-4 of the field manual has NRCS contact information.)
- ✓ Appendix 6-A has a list of Web resource addresses for soil surveys and maps.

SOIL SERIES



- Soil series names are given to a group of soils with similar characteristics. This is a way of grouping a set of common soil characteristics under one name.
- Soils with the same series name share common characteristics.
- Soil scientists may refer to a series rather than naming all of the characteristics. With practice, you will become familiar with the soil series in your area.
- Each soil series will have a description of characteristics that includes:
 - ✓ Slope
 - ✓ Soil color
 - ✓ Soil texture
 - ✓ Soil structure
 - ✓ Consistence
 - ✓ Mottling (redoximorphic features)
 - ✓ Rock fragment content
- All of these characteristics have been covered in previous chapters.



KEY POINTS

- **Use the soil survey map and corresponding text as a reference tool to prepare for site testing.**
- **Become familiar with the soil conditions in the area where you will be doing your SEO work. This will help you identify characteristics that you may encounter in soil probes at sites where onlot sewage disposal systems are proposed.**