# 011 How to recognize and use components in soil survey

## Title:

<table>
<thead>
<tr>
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<th>How to recognize and use components in soil survey</th>
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## Type:

- [ ] Skill
- [x] Knowledge

## Performance Objectives:

The Soil Scientist will be able to:

- Repeat the context for use of components
- List and define the 5 kinds of components
- Recognize what a Variant from past soil surveys is today

## Target Proficiency:

- [ ] Awareness
- [ ] Understanding
- [x] Perform w/ Supervision
- [ ] Apply Independently
- [ ] Proficiency, can teach others

## Trainer Preparation:

- Trainer should be familiar with the assigned reading/review material in the lesson plan that follows. Pull together local examples of the 5 kinds of components prior to training (see Cycle Step 4 below)

## Special Requirements:

Initiate an external learning request with a SF-182 in Aglearn for this activity. Instructions and a template are located on the training webpages for OJT modules.

## Prerequisite Modules:

None

## Notes:

- Acquire this knowledge prior to attendance of the Soil Correlation course
- Testing during the Soil Correlation course will include measurement of this knowledge
- Exercises during the Soil Correlation course will require this knowledge
- Map unit design and correlation within the assigned MLRA requires this knowledge

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## Approved by:

Shawn McVey
The Five Step OJT Cycle for Declarative Training
(Knowledge)

Cycle Step 1
Trainer/Trainee
establish shared
Mental model

Cycle Step 2
Trainer/Trainee
review
materials
provided

Cycle Step 3
Trainer and Trainee
Discuss information

Cycle Step 4
Trainer observes
Trainee performs
task provided as
Feedback

Cycle Step 5
Trainer/Trainee
Debrief

Trainer
And
Trainee
<table>
<thead>
<tr>
<th>WHAT</th>
<th>WHY, WHEN, WHERE, HOW, SAFETY, QUALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycle step 1</td>
<td>MLRA SSO leader and Soil Scientist review objective(s) of module, agree as to what are components, where are they used</td>
</tr>
<tr>
<td>Cycle step 2</td>
<td>Trainee (and trainer) should access via the internet and:</td>
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<tr>
<td></td>
<td>• Read/Review NSSH Part 627.04, and NSSH Exhibit 627-1</td>
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<tr>
<td></td>
<td>• Read/Review Soil Survey Manual, chapter 2, section on Soil Series:</td>
</tr>
<tr>
<td></td>
<td>○ New series, variants, taxadjuncts</td>
</tr>
<tr>
<td></td>
<td>○ Phases</td>
</tr>
<tr>
<td></td>
<td>○ Miscellaneous areas</td>
</tr>
<tr>
<td>Cycle step 3</td>
<td>Trainer leads, ask them to:</td>
</tr>
<tr>
<td>1.</td>
<td>List the 5 kinds of components. Ask them to make a list</td>
</tr>
<tr>
<td>2.</td>
<td>Define a series. Ask them to define a series</td>
</tr>
<tr>
<td>3.</td>
<td>Define a taxonomic category above the series. Ask them to define a taxonomic category above the series</td>
</tr>
<tr>
<td>4.</td>
<td>Define a taxadjunct. Open the Attachment; Taxadjunct or New Series.pdf</td>
</tr>
<tr>
<td></td>
<td>• Compare it to a Series.</td>
</tr>
<tr>
<td></td>
<td>• What two main criteria does it have.</td>
</tr>
<tr>
<td></td>
<td>• Why use it.</td>
</tr>
<tr>
<td>5.</td>
<td>Define miscellaneous areas. Ask them where they can find a list of miscellaneous areas (2)</td>
</tr>
<tr>
<td>6.</td>
<td>Define phasing of components. Discuss how they were used in the past in your MLRA and what you will do with the existing ones today</td>
</tr>
<tr>
<td>7.</td>
<td>Define a Variant as used in soil survey work prior to 1991. Discuss what will happen to Variants during updates today</td>
</tr>
<tr>
<td>8.</td>
<td>Define what an unnamed component (inclusion) was in prior soil survey work. Discuss what will happen to unnamed minor components during updates today</td>
</tr>
<tr>
<td>Cycle step 4</td>
<td>• Pull together examples of each kind from the MLRA and ask them to name and discuss why it is what it is.</td>
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<tr>
<td></td>
<td>• Give them the quiz provided</td>
</tr>
<tr>
<td>Cycle step 5</td>
<td>Debrief, MLRA SSO leader addresses any questions and concerns</td>
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<tr>
<td>Refresh.</td>
<td>Within a week, repeat some of the above for retention purposes.</td>
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OJT Module Lesson Measurement of Learning

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<tr>
<th>WHAT</th>
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<tr>
<td>Quiz</td>
<td>Complete the quiz below.</td>
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**SF-182**

Trainee and/or supervisor access Aglearn to verify completion of the module via its SF-182.
Quiz

1. A taxadjunct has responses to use and management that are dissimilar to those of the named series.
   
   True
   
   False

2. In an update, a Variant in your legend would probably be correlated to an existing series in most cases today.
   
   True
   
   False

3. A new miscellaneous area may be used without approval from the NSSC.
   
   True
   
   False

4. In a present day update, an unnamed component (an inclusion in the previous soil survey map unit) would definitely not fit into any soil series.
   
   True
   
   False

5. A soil series is part of our current classification system hierarchy.
   
   True
   
   False

6. Phasing components allows you to have 2 or more of the same named component (Theta and Theta, wet as examples), each with different interpretive properties.
   
   True
   
   False