### OJT Training Module Cover Sheet

**Title:** 134 Subaqueous soils-How to fill out a subaqueous soil description form.

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<tr>
<th>Type:</th>
<th>Skill</th>
<th>Knowledge</th>
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**Performance Objective:** Trainee will be able to...
- Record soil descriptions for subaqueous soils according to NCSS standards.

**Target Proficiency:**
- Awareness
- Understanding
- Perform w/ Supervision
- X Apply Independently
- Proficiency, can teach others

**Trainer Preparation:**
- Have current version of the *Field Book for Describing and Sampling Soils* available for use.
- Have current *Keys to Soil Taxonomy* available to reference.
- Print out hard copy of the subaqueous soil description form related to the *Field Book for Describing and Sampling Soils*.
- Dedicate time to work with the trainee one-on-one (and not part of a project so that you are focused on training only for cycle step 2 in this module).

**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:**
Describing subaqueous soils follows conventions similar to those of terrestrial soils. Hence, the following are considered prerequisites:
- 101 How to use the *Field Book for Describing and Sampling Soils*.
- 103 How to create sketches for a 232 soil description.
- 107 How to describe soil matrix colors.
- 108 How to describe mottles.
- 109 How to describe redoximorphic features.
- 112 Texture-How to describe sand, silt, and clay in the soil.
- 113 Texture-How to distinguish sand fractions in the field.
- 114 Texture-How to estimate soil texture of soils with different kinds of clay.
- 115 Texture-How to describe texture in organic soil.
- 116 Fragments-How to describe content of rock and other fragments in the soil.
- 117 Fragments-How to describe size of rock and other fragments in soil.
- 118 Fragments-How to describe kinds of rock and other fragments in soil.
- 122 Soil Consistence-How to describe manner of failure.
- 133 How to describe soil odor.

**Notes:**
Because most guidance for subaqueous soils is similar to that for terrestrial soils, only one module has been prepared. Properties that are done differently or that are unique to subaqueous soils will be noted in this module.
<table>
<thead>
<tr>
<th><strong>Authors:</strong></th>
<th>Marc Crouch</th>
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<tbody>
<tr>
<td><strong>Approved by:</strong></td>
<td>Shawn McVey</td>
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</table>
The Five-Step OJT Cycle for Procedural Training (Skill)
OJT Module Lesson

Title: 134 Subaqueous soils-How to fill out a subaqueous soil description form.

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<th>WHAT</th>
<th>WHY, WHEN, WHERE, HOW, SAFETY, QUALITY</th>
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<tbody>
<tr>
<td>Cycle step 1</td>
<td>Trainer and trainee review objective and agree on a plan to achieve the target proficiency. Plan should include covering each cycle step as outlined below, utilizing project activities for cycle steps 3 and 4. Access hardcopy or via the internet the <em>Field Book for Describing and Sampling Soils</em>.</td>
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<tr>
<td>Cycle step 2</td>
<td>Trainer should do the following:</td>
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<tr>
<td>1. Describe the site, filling out the form appropriately according to Field Book guidelines.</td>
<td>Trainee observes your work. Answer any trainee questions. Include description of bathymetry for the site following Field Book guidelines and referencing the <em>Geomorphic Description System</em> for subaqueous soil geoforms.</td>
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<tr>
<td>2. Measure and describe the water column.</td>
<td>Trainee observes your work. Answer any trainee questions. Describe pH, pH method, dissolved oxygen, salinity, and water temperature.</td>
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</table>
| 3. Describe the pedon, filling out the form according to Field Book guidelines. | Trainee observes your work. Answer any trainee questions. Except for the following, property description is similar to terrestrial soils. For the following, refer to the Field Book for proper sampling and description procedures.  
  - Reaction to H₂O₂  
  - Reaction by oxidized pH  
  - Origin  
  - Salinity |
| 4. Complete a sketch. | Sketching basics are covered in the module for terrestrial soils. Trainer should take this opportunity to sketch features unique to subaqueous soils. |
| Cycle step 3 | As you or someone else describes a pedon, have the trainee fill out the subaqueous soil description form. Observe this process and critique effort as the description is completed. Do this one or more times until trainee is comfortable with filling out the form. |
Cycle step 4
Allow the trainee to independently complete the form for soil descriptions during several project activities.

Cycle step 5
Review descriptions for accuracy, completeness, and adherence to the Field Book guidelines. Repeat cycle steps 3 or 4 as needed to achieve target proficiency.

OJT Module Lesson Measurement of Learning

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<tr>
<td>Completely fill out several 232 soil description forms for MLRA SSO project activities.</td>
<td>Use cycle step 4 as the measurement of learning. Complete performance report form when you are satisfied trainee has met target proficiency.</td>
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SF-182

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