# OJT Training Module Cover Sheet

**Title:** 1010 Soil Salinity – understand the effects and management practices to apply.

<table>
<thead>
<tr>
<th>Type:</th>
<th>☐ Skill</th>
<th>☒ Knowledge</th>
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**Performance Objective:** Trainee will:
- Understand the effects of soil salinization on plant growth.
- Recognize basic management practices for controlling saline areas.

**Target Proficiency:**
- ☐ Awareness
- ☒ Understanding
- ☐ 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.

**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.
- CAUTION - Be able to traverse uneven surfaces in the field and operate a spade or other digging tool.

**Prerequisite Modules:**
- 1104 How to identify landscapes, landforms, and surface morphometry-overview.
- 1008 Soil Salinity – Understand salinity development.
- 1009 Soil Salinity – how to Identify and measure.

**Notes:**
None

**Authors:**
Kent Cooley

**Approved by:**
Marc Crouch
Craig Ditzler
The Five-Step OJT Cycle for **Declarative** Training (Knowledge)

- **Cycle Step 1**: Trainer/Trainee establish shared mental model
- **Cycle Step 2**: Trainee reviews 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

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**Trainer And Trainee**
# OJT Module Lesson

**Title:** 1010 Soil Salinity – understand the effects and management practices to apply.

<table>
<thead>
<tr>
<th>WHAT</th>
<th>WHY, WHEN, WHERE, HOW, SAFETY, QUALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third of three related soil salinity modules to be completed together.</td>
<td>Review objectives and locate references used as job aids for this module.</td>
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**Cycle step 1**

- Trainer and trainee should access via the internet and read/review:
  - 4. *Agricultural Resource Conservation Program 2 CRP (Rev. 4)* Exhibit 9

**Cycle steps 3 & 4**

- Do the following:
  
  1. **Understand the effects of soil salinization on plant growth.**
     - Class exercise – discuss the effects of salinity on plant physiology (see reference 1) (water/nutrient uptake and toxicity).
  
  2. **How to manage saline areas.**
     - Class or field exercise – discuss management options to remove excess soil water from the profile to control seeps (see reference 2 page 9-12) (proper grazing management, continuous cropping, use of perennial crops or trees in recharge areas); review salt tolerance of plant species (see references 1, 3), and review USDA programs designed to aid in control of saline areas (CRP - CP18A, B, and C) (see reference 4).

**Cycle step 5**

- Instructor summarizes what has been learned and lead into the next related module.
# OJT Module Lesson Measurement of Learning

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| Office and field exercise for three related soil salinity modules | Trainer selects a field site for trainee to apply learning.  
Trainee should then prepare a report that demonstrates the ability to:  
- Identify the hillslope position.  
- Identify the salinity indicators present.  
- Provide observations as to why the seep(s) formed.  
- Take and record an EC reading.  
- Report the comparable salinity class from the table referenced.  
- Identify management options. |

## SF-182

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