

Irrigation Training Toolbox Irrigation System Evaluation

Lesson Plan Evaluating Data Obtained From a Sprinkler Irrigation

National Employee Development Center
Natural Resources Conservation Service
Fort Worth, TX
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Irrigation Training Toolbox

Irrigation Systems Evaluation

COURSE: Irrigation Systems Evaluation

LESSON TITLE: Evaluating Data Obtained From A Sprinkler Irrigation

OBJECTIVES: Give each participant experience in plotting and analyzing data obtained from a sprinkler irrigation.

METHOD: Classroom discussion and supervision.

TRAINING AIDS: Projector and slides

DEVELOPED BY: West National Technical Center

IRRIGATION WATER MANAGEMENT EVALUATING DATA OBTAINED FROM A SPRINKLER IRRIGATION

INTRODUCTION

BODY

A. Evaluate Sprinkler Irrigation Data

1. Check data on area sprinkled to see that all needed information has been obtained. Complete EXHIBIT - IWM - 9, Items 10 2, 3, and 4.
2. Determine depth of water applied by sprinkler discharge.
3. Determine the depth of water needed to be applied from soil moisture data. Complete EXH. - IWM 1 and 4 for "before" and "after" conditions.
4. Determine minimum frequency (interval in days) between irrigations.
5. Summarize catch can data on sprinkler data form.
6. Review moisture distribution.
7. Determine pattern efficiency of gaged area.
8. Determine water losses of the gaged area.
9. Determine application efficiency of the gaged area.
10. Determine application efficiency for the lateral.
11. Determine the system efficiency.
12. Determine the time required for each lateral setting,
13. Determine the number of lateral moves per day.
14. Determine the number of days to cover field.
15. Determine the sprinkler system capacity.

16. Determine the pressure requirements of the pump.
17. Determine field application efficiency.
18. Make recommendations.

SUMMARY