



Irrigation Toolbox Chapter 7

Irrigation Water Management Plan

IRRIGATION WATER MANAGEMENT PLAN

Introduction

- The material provided in this section is intended to serve as a framework for irrigation water management plan training.
- Trainers should modify the training material referenced as necessary to achieve the planned skill level for the trainees.
- Trainers are encouraged to include locally developed training materials to complement and/or supplement the referenced material.
- As new training materials are developed by trainers, they are encouraged to furnish copies to the Irrigation ToolBox Manager for inclusion in future versions of the assembled material.

Suggested Objectives

1. List the requirements of a water management plan as it pertains to irrigation, frost protection, and related uses.
2. Analyze resources, design data, and field and system evaluation data and incorporate this data into a water management plan.
3. Present the water management plan and recommendations to the irrigator/landuser in such a manner that they will understand and accept both the plan and the benefits.

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Suggested Outline

- I. Introduction
- II. Body
 - A. Data Gathering
 - 1. Field and crop data
 - 2. Soils data
 - 3. Monthly and peak daily consumptive use
 - 4. Management allowed soil moisture depletion
 - 5. Irrigation scheduling method
 - 6. Soil moisture monitoring method
 - 7. Irrigation application amount, timing and rate
 - B. Develop procedures and alternative plans
 - C. Example worksheets
 - D. Document cultural practices
 - E. Applicable practice standards
 - F. Conclusions and Recommendations
- III. Summary

Note: Note all copies of documents that were contained in the original Irrigation Training Toolbox are available electronically.

If you are unable to find a hard copy of a document in your state, you may be able to borrow a copy from the Water Management Engineer at your regional National Technology Support Center.

IRRIGATION WATER MANAGEMENT PLAN

Reference Material

- NEH Part 652: National Irrigation Guide, Chapter 9: Irrigation Water Management.
- NEH Part 652: National Irrigation Guide, Chapter 15: Resource Planning and Evaluation Tools and Worksheets

Toolbox Material

- Lesson Plan "Water Management for Water Quality Protection and Water Conservation", NRCS
- Lesson Plan "Irrigation Water Management Plan", NRCS, Florida
- Lesson Plan "QT=DA", NRCS, Nebraska
- Lesson Plan "Planning and Applying Conservation Practices", NRCS
- Lesson Plan "USDA-SCS Fact Sheets", NRCS
- Lesson Plan "Measuring the Flow From the Water Source", NRCS
- Lesson Plan "IWM Conservation Irrigation Farm Plans", NRCS
- Lesson Plan "IWM Sample Plan", NRCS
- Lesson Plan "IWM Sample Plan Blank", NRCS
- Lesson Plan "IWM Samples, Modified Blaney-Criddle Consumptive Use Computations", NRCS
- Video "Irrigation Management", Oklahoma State University
- Video "Irrigation Energy Conservation", Oklahoma State University
- Video "Micro Irrigation Management", Richard J. Salty Productions, Burbank, CA
- Video "Introduction to Ground Water Quality Improvements in Irrigated Agriculture", University of Nebraska

- Slides "Agrichemical Water Quality Training Series - Protection and Water Conservation", NRCS

Facilitation Options

- Self-paced,
- Facilitator guided, or
- Formal classroom training.

Evaluation

- Each state should develop an evaluation procedure which addresses the level of competence desired before and after training is provided.