

Irrigation Training Toolbox Irrigation System Evaluation

Lesson Plan Pumping Plant Evaluation

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

Irrigation System Evaluation

COURSE: Pumping Plant Evaluation

LESSON TITLE: Information Gained From an Evaluation

OBJECTIVES: Upon completion of this training, the student will be able to:

1. Explain to producers why they should be concerned about their pumping plant efficiency.
2. List the information a producer will have after his pump has been tested.

REFERENCES:

TRAINING AIDS:

TIME: 15 Minutes

DEVELOPED BY: Kyle R. Sikes

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Introduction

A. Producers Concerns About Irrigation Efficiencies

B. Information Gained From an Evaluation

1. Cost/hr to operate a pumping plant.
2. Cost/ac-in of water.
3. Cost/ac to supply a certain application.
4. Cost/season to operate the well.
5. Well Yield.
6. Discharge pressure the pump is working against.
7. Pumping water level in the well.
8. Kwh/hr or MCF/hr the well is using.
9. Pumping plant efficiency.
10. Pump efficiency on electric pumping plants.
11. Savings per season if the pumping plant efficiency were brought up to the standard (field attainable) level.
12. Horsepower into the pumping plant.
13. Horsepower out of the pumping plant.
14. Whether the electric motor on the pumping plant is over or under loaded.

Summary