



**CONSERVATION ENHANCEMENT ACTIVITY**

**E449B**

**CONSERVATION STEWARDSHIP PROGRAM**

**Alternated Wetting and Drying (AWD) of rice fields**

**Conservation Practice 449: Irrigation Water Management**

**APPLICABLE LAND USE: Crop (Annual & Mixed)**

**RESOURCE CONCERN: Water**

**PRACTICE LIFE SPAN: 1 year**

**Enhancement Description**

Rice fields are drained and allowed to “dry down” to a saturated soil condition prior to re-flooding the field. System is installed in year 1 with Scenario E449144Z8 and this scenario used in years 2-5.

**Criteria**

- Deliver water to individual rice paddies through a “multi-inlet” or “side-inlet” distribution system, or the field has been graded flat.
- Prepare and plant the fields using typical agricultural practices.
- If necessary to germinate seed, flood the field, then allow the field to dry down and plants to reach the fifth leaf (first tiller) stage before establishing full flood.
- Flood the field based on typical triggers such as plant growth stage, presence of weeds, and soil moisture.
- Implement a cyclical drying-wetting regime throughout the growing season as follows:
  - Terminate irrigation and allow the field to “dry down” to a saturated soil condition.
  - For sloping fields, the upper 10% of each paddy should reach saturated soil condition prior to the next flood cycle.

E449B - Alternated Wetting and Drying (AWD) of rice fields	August 2019	Page   1
--	-------------	----------



## CONSERVATION STEWARDSHIP PROGRAM

- After dry-down, resume irrigation flooding to typical levels.
- Repeat the cycle throughout the growing season.
- Near the end of the season, terminate irrigation based on plant growth stage as recommended by local Land Grant University personnel and allow the field to “dry down” prior to harvest.
- Comply with the requirements of the NRCS Conservation Practice Standard Irrigation Water Management (Code 449) and your site-specific Irrigation Water Management Plan.



## CONSERVATION STEWARDSHIP PROGRAM

### Documentation and Implementation Requirements

#### **Participant will:**

- Prior to implementation, acquire an irrigation water management plan meeting NRCS Conservation Practice Standard Irrigation Water Management (Code 449) requirements.
- During implementation, record irrigation data such as location, date, duration, and flow rate of all irrigation operations, rainfall, evapotranspiration, and water level data.
- During implementation, utilize dated digital photography to document “dry down” conditions. Each photo should indicate the location and field where the photo was taken.
- After implementation, make the following items available for review by NRCS to verify implementation of the enhancement:
  - Irrigation water management plan and records kept.
  - Dated digital photography used to document “dry down” conditions.

#### **NRCS will:**

- Prior to implementation, provide and explain NRCS Conservation Practice Standard Irrigation Water Management (Code 449) as it relates to implementing this enhancement
- During Implementation, provide additional technical assistance to the participant as requested.
- After implementation, verify implementation of the irrigation water management plan, by reviewing records kept during enhancement implementation.



# CONSERVATION STEWARDSHIP PROGRAM

**NRCS Documentation Review:**

I have reviewed all required participant documentation and have determined the participant has implemented the enhancement and met all criteria and requirements.

Participant Name \_\_\_\_\_ Contract Number \_\_\_\_\_

Total Amount Applied \_\_\_\_\_ Fiscal Year Completed \_\_\_\_\_

\_\_\_\_\_  
NRCS Technical Adequacy Signature

\_\_\_\_\_  
Date

