**CONSERVATION ENHANCEMENT ACTIVITY**

E646A

**Close structures to capture and retain rainfall for waterfowl and wading bird winter habitat**

Conservation Practice 646: Shallow Water Development and Management

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

**RESOURCE CONCERNS:** Animals

**ENHANCEMENT LIFE SPAN:** 5 years

**Enhancement Description:**

When flooded to shallow depths during fall and winter, agricultural fields provide ideal foraging habitat for myriad species of waterfowl and wading birds. In addition, flooded conditions promote establishment of aquatic invertebrate populations, thus providing protein-rich food sources for shorebirds as well as waterfowl and wading birds.

**Criteria:**

This enhancement applies to crop land use acres with leveed fields capable of holding water at an average depth of 6 to 18 inches for the duration of the activity.

- Develop a wildlife habitat management plan for the targeted species suite.
- Water control structures that affect applicable fields will be closed by mid-fall and remain closed through February 15. For fields where harvest of the crop occurs after mid-fall (e.g., ratoon rice), structures must be closed within 2 days following harvest and remain closed through February 15.
- Applicable fields must be flooded to an average depth of 6 to 18 inches.
  - Water depths of 6 to 10 inches provide maximum benefit to targeted species.
  - Water depths shall not exceed 18 inches for any extended period.
• Manipulation can occur prior to holding water. Manipulation should not affect more than 80 percent of the field to which the activity is applied.

• A Wildlife Habitat Evaluation Guide (WHEG) specific to shallow water habitat on cropland must be used to show that implementation of the Enhancement will improve wildlife habitat value from fair (planning criteria = 0.5) to good (planning criteria greater than 0.5 and less than or equal to 0.6) or from good to very good (planning criteria greater than 0.6).

Note: This Enhancement may be paired with E647A - Manipulate vegetation on fields with captured rainfall for waterfowl and wading bird winter habitat. If not paired with E647A, this Enhancement may also be paired with E646C – Manipulate vegetation and maintain closed structures for shorebird mid-summer habitat or E646D – Manipulate vegetation and maintain closed structures for shorebird late summer habitat.
Documentation and Implementation Requirements:

Participant Will:

☐ Prior to implementation, ensure all water control structures are in proper working order.
☐ Prior to implementation, meet with NRCS to review the results of the wildlife habitat assessment conducted by NRCS and discuss range of management alternatives that would improve wildlife habitat conditions.
☐ Prior to implementation, meet with NRCS to obtain and review the Wildlife Habitat Management Plan.
☐ During implementation, follow the Wildlife Habitat Management Plan including opening / closing water control structures as specified, to hold water at the proper time and at the proper depth.
☐ During implementation, maintain field log to include:
  o Crops grown and the harvest date for the crops grown on the applicable acres;
  o Date/time the water control structure was closed;
  o Date/time of each field visit and observed water levels or percent holding capacity and average water depths;
  o Date/time when the water control structures were opened
  o Digital photographs documenting the condition of the structures and the habitat provided
☐ After implementation, provide the field log to NRCS for review to verify enhancement was implemented to meet criteria.

NRCS Will:

☐ As needed, provide additional technical assistance to the participant.

☐ Prior to implementation, verify the enhancement will be applied to cropland acres with leveed fields capable of holding water at an average depth of 6 to 18 inches for the duration of the activity.

☐ Prior to implementation, assess habitat condition using the Wildlife Habitat Evaluation Guide to calculate current WHEG score and anticipated WHEG score after implementation of
Enhancement. **Existing WHEG score = __________**
**Planned Post Implementation WHEG score = __________**

- Prior to implementation, review results of the wildlife habitat evaluation with participant and discuss range of management alternatives that would improve wildlife habitat conditions.
- Prior to implementation, develop a Wildlife Habitat Management Plan for targeted suite of species.
- Prior to implementation, meet with the participant to review the Wildlife Habitat Management Plan.
- After implementation, reassess habitat condition using the Wildlife Habitat Evaluation Guide; **Post Implementation WHEG score = __________**
- After implementation, review completed field log to verify enhancement was implemented to meet criteria.

**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 ___________