



CONSERVATION ENHANCEMENT ACTIVITY

E646138Z2

CONSERVATION STEWARDSHIP PROGRAM

Extend retention of captured rainfall to provide late winter water habitat for migratory waterfowl and shorebirds

Conservation Practice 646: Shallow Water Development and Management

APPLICABLE LAND USE: Crop (Annual & Mixed)

RESOURCE CONCERN ADDRESSED: Fish & Wildlife – Inadequate Habitat

PRACTICE LIFE SPAN: 5 years

Enhancement Description:

When flooded to shallow depths during fall and winter, agricultural fields provide ideal habitat for myriad species of waterfowl and wading birds. Harvested and idled agricultural lands, notably those occurring within rice rotations, contain high densities of residual (i.e., waste) grain and natural seeds following harvest. In addition, flooded conditions provide access for waterfowl and wading birds and promote establishment of aquatic invertebrate populations, thus providing protein-rich food sources for shorebirds as well as waterfowl and wading birds. Benefits may become greatest during late winter and early spring as birds are assimilating nutrient and fat reserves in preparation for northward. However, agricultural fields flooded during fall-winter are typically drained during late January or February in advance of spring planting. This often results in a rapid reduction in available habitat, and may constrain ability of migratory birds to adequately prepare for migration, with greatest impacts likely occurring during years of low winter precipitation. Retention of water on agricultural lands into early spring will produce maximum benefits to migratory waterfowl and shorebirds by providing high quality habitat during a time when habitat may otherwise be in low abundance.

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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 affecting the subject land use are to be closed by mid-fall and remain closed until late winter to early spring.
 - Water depths of 6 to 10 inches provide maximum benefit to targeted species.
 - Water depths shall not exceed 18 inches for any extended period.
- 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 grouped with E646138Z3-Shorebird habitat, late season shallow water with manipulation or E646138Z4-Shorebird habitat, extended late season shallow water with manipulation.

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Documentation and Implementation Requirements:

Participant Will:

- Prior to implementation, ensure water control structures are in proper working order.
- Prior to implementation, meet with NRCS to review results of 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 Wildlife Habitat Management Plan.
- During implementation, follow Wildlife Habitat Management Plan including opening / closing water control structures as specified in order to hold water at the proper time and at the proper depth
- During implementation, maintain field log to include:
 - Crops grown and the harvest date for the crops grown on the applicable acres;
 - Date/time the water control structure was closed;
 - Date/time of each field visit and observed water levels or percent holding capacity and average water depths;
 - Date/time when the water control structures were opened
 - 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 this 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 Wildlife Habitat Evaluation Guide to calculate current WHEG score and anticipated WHEG score after implementation of

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