



CONSERVATION ENHANCEMENT ACTIVITY

E646D

CONSERVATION STEWARDSHIP PROGRAM

Manipulate vegetation and maintain closed structures for shorebird late summer habitat

Conservation Practice 646: Shallow Water Development and Management

APPLICABLE LAND USE: Crop (Annual & Mixed)

RESOURCE CONCERNS: Animals

PRACTICE LIFE SPAN: 5 years

Enhancement Description:

Suitable shorebird habitat is limited during the summer and fall as birds migrate south post-breeding. Providing shallow water and mud flat habitat will benefit a variety of shorebird species. Optimal conditions are created when water levels are slowly reduced through evaporation, which allows for propagation of invertebrates (typically insect larvae) used as food by shorebirds. Manipulation of vegetation, preferably through rolling, creates open conditions required by this suite of birds as a means to detect and avoid predators, and provides nutrient inputs for invertebrate production.

Criteria:

This enhancement applies to crop land use acres with leveed fields that are capable of holding 8 to 18 inches of water mid-spring with capabilities for retaining that water until August 31, and will have less than 25 percent woody cover.

- Develop a wildlife habitat management plan for the targeted species suite.
- Water control structures are to remain closed in order to catch and hold all available precipitation until late-summer (i.e., August 31).

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- Sites must contain 8 to 18 inches of water.
- Manipulate vegetation on the site, if after June 15, the site becomes dry with emergent vegetation covering 50 percent or more, at a height of 6 inches or more. Manipulation by rolling or disking to bring the majority (75 percent or more) of the vegetation at or below the soil surface. Rolling is the preferred method of manipulation to maintain soil quality.
- The need for vegetative manipulation will be triggered by the above stated scenario. However, multiple manipulations may be needed to achieve the desired habitat response.
- 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 E646B - Extend retention of captured rainfall for waterfowl and wading bird late winter habitat.

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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 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 the 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 8 to 18 inches of water mid-spring with capabilities for retaining that water until August 31, and will have less than 25 percent woody cover.
- 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 = _____**

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- 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 the Wildlife Habitat Management Plan for targeted suite of species.
- Prior to implementation, meet with participant to review the Wildlife Habitat Management Plan.
- After implementation, reassess habitat condition using Wildlife Habitat Evaluation Guide; **Post Implementation WHEG score = _____**
- After implementation, review the 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

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**WASHINGTON SUPPLEMENT TO
CONSERVATION ENHANCEMENT ACTIVITY
E646D**

**CONSERVATION
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The following references may help assess and manage habitat conditions for shorebirds using this enhancement activity:

- Washington’s Biology Technical Note 14 Wildlife Habitat Evaluation Guide (Cropland tab) may be used to calculate both the current score as well as the anticipated score following implementation of the Enhancement. Biology Tech Note 14 can be found in the NRCS Field Office Technical Guide for Washington, in Section I/References Lists/Technical Notes by Discipline/Biology.
- The National Land Use Assessment questions in CART may also be useful for assessing pre-and post-implementation habitat conditions – check with NRCS State or Area Biologist.
- Washington’s specifications for CPS 646 Shallow Water Development and Management are found in the NRCS Field Office Technical Guide for Washington, in Section 4/ Conservation Practice Standards & Support Documents/ Shallow Water Development and Management (646)/ [646 WA IR Shallow Water Development and Management 2014](#).
- For further information on shorebirds in particular areas of the state, see the Washington Department of Fish & Wildlife (WDFW) Priority Habitats and Species (PHS) database: <http://wdfw.wa.gov/mapping/phs/>; also, management plans for nearby WDFW Wildlife Areas may provide helpful information on habitat management considerations in your area: <https://wdfw.wa.gov/about/wdfw-lands/wildlife-area-planning>

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