

Wetland Wildlife Habitat Management (644C), Cropland – Seasonal Flooding with Gradual Drawdown

644C – Specification

June 2016

Definition

The application of water and subsequent drawdown to fallow or early-harvested fields in late summer/early fall. This short-term flooding can be applied on any annual crop type. In this practice, fields are flooded for two weeks, followed by two weeks of gradual draining, during late summer. This practice creates shallow-water habitat for early arriving migratory waterbirds, particularly shorebirds, that are returning to the Central Valley from their breeding grounds at a time when there is very little suitable habitat on the landscape.



Requirements

- Water is applied between July 1 and September 15 and held for 14 days at a depth of 2–4 inches, followed by gradual draining over a 14 day period.
- Field is not disturbed for at least 30 days (not planted, harvested, worked, or sprayed) during practice duration.
- If multiple fields are available for enrollment, flooding will occur across an entire field, and additional fields are flooded sequentially every other week in accordance with a water management plan.
- Vegetation management: Prior to flooding, vegetation is removed/harvested and the field surface is baled, burned, chopped, stomped, rolled, or has only one pass of light tillage that leaves at least 60% residue on the surface.

Planning considerations

- Reference local mosquito control regulations.
- Recommended crops for this practice include wheat and other small grains, garbanzo beans, sunflower, safflower, or any crops harvested early enough to flood during this time period.
- If only one field is available, the field should be split into two sections and each section flooded two weeks apart (can move water from one section to the other).
- If fields are steeply sloped, put a large berm on the lower end of the field to hold water or separate the field into sections to reduce slope and help control water depths.
- Earthen berms, rather than levees and check boxes, can provide sufficient structure around fields to hold water.
- This practice is best applied on less permeable soils to increase the likelihood that water stays on the surface.
- The goal is to create a smooth surface where straw has been mostly incorporated into the soil and little stubble is left standing. Shorebirds use shallow water and mudflat-like habitats and the goal of this practice is to create these habitats during fall migration.
- Priority areas: Land in the Sacramento-San Joaquin Delta where late summer wetland habitat is no longer available at historic quantities.

Operation and Maintenance: Implementation of this practice will include a plan for monitoring and maintenance of structural, hydrologic, and vegetative measures.