



**CONSERVATION ENHANCEMENT ACTIVITY**

**E554118Z2 - Colorado**

**CONSERVATION  
STEWARDSHIP  
PROGRAM**

Saturated buffer drain outlet

**Conservation Practice 554: Drainage Water Management**

**APPLICABLE LAND USE: Crop (Annual & Mixed); Crop (Perennial);  
Associated Ag Land**

**RESOURCE CONCERN ADDRESSED: Water Quality Degradation**

**ENHACNEMENT LIFE SPAN: 1 year**

**Enhancement Description:**

Install Conservation Practice Standard 604, Saturated Buffer so all of the drain outlets on a field are routed through an appropriate buffer.

**Criteria:**

- The riparian buffer will be vegetated to prevent erosion and utilize nitrogen. Minimum width of buffer will be 30 feet.
- Distribution and overflow pipes will be based on expected flow rates from the subsurface drainage system.
- Overflow pipe will be non-perforated pipe.
- Locate distribution pipes to facilitate uniform groundwater inflow.
- Install observation ports at each end of distribution pipe for inspection and monitoring water levels.
- System shall be capable of maintaining a water table within 24 inches of the ground surface at the distribution pipe.
- Remove invasive trees and shrubs to reduce distribution line plugging.



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### Documentation and Implementation Requirements:

Participant will:

- Prior to implementation, acquire NRCS approval of selected locations for installation of the enhancement.
- Prior to implementation, submit for NRCS's approval the plan view and layout of the distribution system with profiles of existing drain, distribution pipe, and outlet channel.
- During implementation, document and record installation including photos.
- During implementation, develop an operation and maintenance plan including water level management and timing, inspection requirements for the structures, pipelines, and drainage system.
- During implementation, bi-weekly record water levels when a water table is present and following precipitation events that result in high flows
- After implementation, make the follow items available for review by NRCS to verify implementation of the phosphorous removal system enhancement:
  - Operation and maintenance plan
  - Documentation including photos of installation of structures and distribution system
  - Bi-weekly recording of water levels

NRCS will:

- As needed, provide additional technical assistance to the participant as requested.
- Prior to implementation, as needed, provide explanation of NRCS Conservation Practice Standard Saturated Buffer (Code 604) and any State specific protocol as it relates to implementing this enhancement:
- Prior to Implementation, as needed, provide technical assistance in determining sites for enhancement implementation that meet specified criteria.
- Prior to Implementation, review and approve plan view and layout of the distribution system with profiles of existing drain, distribution pipe, and outlet channel.
- After implementation, verify installation of structures, operation and maintenance plan, and log of water levels.



**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.

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PROGRAM**

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

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

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

\_\_\_\_\_  
Date

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