Emergency Auxiliary Spillway Repair/Retrofit

Definition/Purpose

Repair or retrofit of auxiliary spillways on existing low-hazard agricultural pond systems that were damaged during the disaster events of 2016. The benefit of repairs reduces the likelihood of pond functions being jeopardized during a storm event. These functions include water supply, erosion control, flood control, and sediment and nutrient reductions from farm fields.

Auxiliary spillways are excavated channels designed to pass excess storm runoff around the dam so that water does not rise high enough to damage the dam by overtopping. The spillway must also convey the water safely to the outlet channel below without damaging the downstream slope of the dam.

Policies

1. The pond shall be for agricultural use.

2. For emergency spillway repairs and retrofits:

    a. The design must be approved by a NC professional engineer, staff working under the responsible charge of a division PE or by staff with NRCS job approval for ponds.

    b. Emergency spillway sizing and installation shall meet specifications in the NRCS Conservation Practice Standard Code 378. Side slopes and spillway bottom must be stable and vegetated or lined with an approved material.

    c. Spillways must be excavated on natural ground. Fill may not be present in any portion of the spillway unless approved by the engineer or person with proper job approval authority.

    d. A modified Emergency Action Plan shall be completed for all pond spillway repairs and retrofits.

3. Trees must be removed from any portion of an existing emergency spillway. Trees outside the spillway that are not dead or unhealthy, and if they are located such that they could not pose structural damage to dam, pipes, or spillway may remain. The spillway shall remain free of trees, shrubs and woody vegetation.

4. Livestock shall be excluded from the dam and spillway. Consider the need to protect the emergency spillway from traffic if used more than 3 times/week or need access immediately following a rainfall event to prevent rutting.

5. Cooperators are responsible for obtaining and complying with all required permits.

6. Minimum life of BMP is 5 years.

7. It is the producer's responsibility to ensure the entire dam structure is maintained for the life of the contract (5 yrs.). All woody vegetation must be kept off the repaired portion(s) of the dam, structures, and emergency spillway. In the event the landowner chooses not to act on deficiencies noted by the engineer and the structure fails, the landowner is not eligible for additional cost share and will be responsible for repairing the structure at their expense or repayment of cost share funds based on a prorated amount. However, the cooperator will be eligible to apply for cost share to replace the emergency restoration with a repair that meets

the relevant NRCS standard.

8. Cost share shall not exceed 75% of average cost (or actual cost with receipts for components with no established average cost).

9. If the pond is no longer used for agriculture during the maintenance period, the cost share contract shall be considered out of compliance.

10. The District shall inspect the site annually during the maintenance period.

Standards

North Carolina NRCS Technical Guide, Section IV, Code #378 (Pond), Code #402. (Dam), NC Dam Safety Law (15A NCAC 02K .0100)