

Conservation Reserve Enhancement Program (CREP)

**NRCS Technical Guidance:
Conservation Plan and Practice
Criteria**



Ecological Sciences Section
November 2014

CREP Technical Assistance

Like every other program, technical assistance (plan and practices) must:

- address a resource concern
- be feasible for the site
- meet NRCS technical standards (FOTG)
- meet CRP and CREP program requirements
 - > FSA - program policy, size, CS policy
 - > NRCS – purpose, size?, CS?

NRCS makes the final practice eligibility decision...

CREP Technical Assistance

What are CREP objectives and resource concerns? What are the purposes for CREP practices?

From NC CREP Agreement...

- Enhance WQ, reduce sediment & nutrients
- Riparian wildlife (migratory birds, mammals, and amphibians)
- Aquatic species (specific T&E, juvenile fish, fin and shellfish)
- Reduce fresh water pulses into nursery areas
- Wetland & Hydrology Restoration

CREP Technical Assistance

Bottom Line

- CREP plans must address CREP objectives/resource concerns (2-CRP).
- Planned practices must be feasible and needed.
- Practice designs **MUST** meet minimum criteria in NRCS FOTG standard, and **MAY** be designed up to the program-allowed maximum (2-CRP)

Conservation Plan Development

NRCS Responsibilities – (same as normal planning)

- ULTIMATELY responsible for developing a Conservation Plan that meets all technical and programmatic requirements (participant must be involved).
- Determine effects and generate CR or T&E survey where appropriate.
- Prepare new or updated NC-CPA-52...make available to FSA so they can sign off and handle unresolved CR, NEPA, etc. issues.

Conservation Plan Development

Coordinating with NCFS & Other Agencies

- NRCS ensures that specific practice requirements are communicated to other agencies (use the Tech Request/other written documentation)
- NRCS checks other agency's plan to insure that prescription meets NRCS practice standards and CRP requirements. **Your plan must be specific!**
- All elements of the other agency plan must be incorporated in overall conservation plan and contract support document (ex. release treatments, etc.)
- NRCS is the technically responsible entity for what is in the plan and contract support documents.

PLAN and CPO REQUIREMENTS

- Prepare using in Toolkit (plan and contract).
- Have a good Conservation Plan Map...use ArcGIS and FSA CLU layer.
- Conservation Plan Map shows CREP field boundaries, qualifying water, practice location (structural practices, planned riparian buffer zones, wildlife openings, natural regeneration, etc.)
- Include all eligible acres...use field numbers and acres from CRP-1. Do not merge fields. (Ineligible acres may be required in plan.)
- Include a soils map and legend

PLAN and CPO REQUIREMENTS - more

- Contains practices and narratives needed for successful establishment and O&M. Refer to Job Sheets (which should have incorporated all requirements of other agency plan), designs/specifications.
- Use CREP Plan Matrix (Nov. 2014).
- Contains required management practices (Also in CREP Plan Matrix)
- CREP with forestry practices under easement MUST have a Forest Management Plan prepared by a registered forester. Management must concur with CREP Approved Forest Management Checklist.

PLAN and CPO REQUIREMENTS - more

Plans cover the standard CRP stuff:

- Prohibits harvesting or grazing
- Contains control of weeds, insects, pests
- Ensures that cover is not disturbed in nesting or brood season
- Is reviewed (signed) by SWCD
- Incorporates requirements for permits (if needed)
- **Is signed by all parties to the CRP-1**
- Schedule to establish cover in 1st 12 months (1st 24 months if approved by COC, NRCS, up to 3 years for certain hardwood situations)

Aids, helps, enhancements to improve plan/contract quality and consistency

- *FSA's Manual "2-CRP"*
- NRCS Planning Matrix for CREP
- Forestry Tech. Request Worksheet
- CREP Hydrology Assessment Form
- CREP Approved Forest Management Checklist
- Updated Cost List
- NRCS Job Sheets

Other CREP Program Issues

- FSA is the contact for cost share questions.
- Be consistent – plan, CREP requirements, other agency plan, job sheets, narratives, etc., etc., etc.
- Mowing and chemical spraying can be done at any time, including primary nesting season if required for establishment.
- Plan 666 for mowing if required for establishment release in years after planting.
- Only 2 CS chemical sprayings are allowed by FSA policy, 1 pre-plant and 1 post plant
- Provide a full copy of plan to FSA (including AD1155, job sheets, Other Agency Plan)
- Provide designs with specific rates, amount, timing to participant (and FSA if requested)

CREP Minimums & Maximums

NRCS Practice Standards & CREP Program policy influence practice design

- *Minimum Criteria* is a **technical** issue (will the practice function properly to accomplish CREP purposes?)
- *Maximum Criteria* is a **program** issue (CREP allows wider width and will often pay for more than the minimum needed to meet NRCS standard?)

CREP Practices

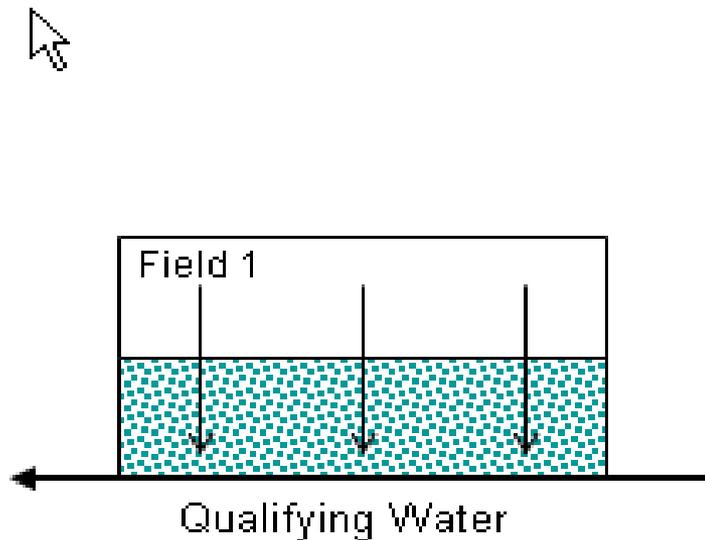
- CP3 Tree Planting
- CP3A Hardwood Tree Planting
- CP21 Filter Strip
- CP22 Riparian Buffer
- CP23 Wetland Restoration
- CP23A Wetland Restoration, Non-Floodplain
- CP31 Bottomland Timber Establishment on Wetland

CREP purpose drives practice design

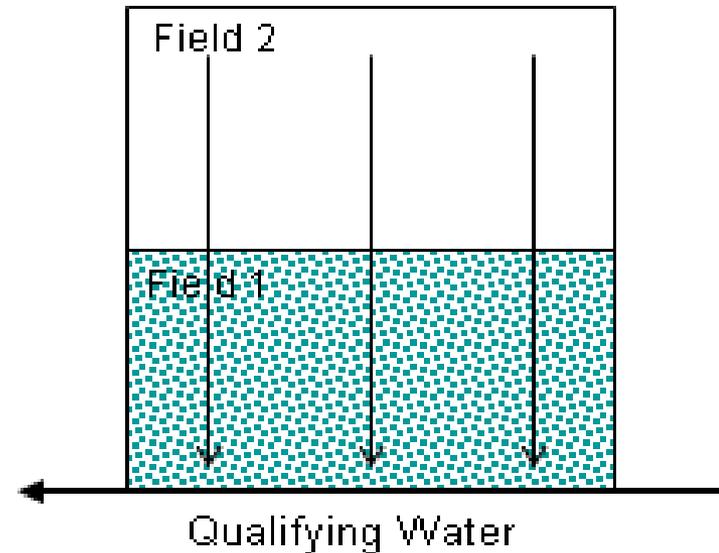
CP21 and CP22 are CREP practices intended to trap and remove pollutants from surface waters and riparian areas

- There must be an up-slope pollutant source
- Enrolled practice area cannot exceed the agricultural pollutant source area (1:1 ratio...pollutant source buffered must exceed or equal the practice extent)
- Agricultural pollutant source can include unbuffered crop, hay, pasture or other non-forest area that could contribute sediment, nutrients, chemicals to receiving waters
- Ag. land flowing through these CREP practices does NOT have to be owned by the CREP participant; or be in same field.

Determining Buffer : Agricultural Land Ratio

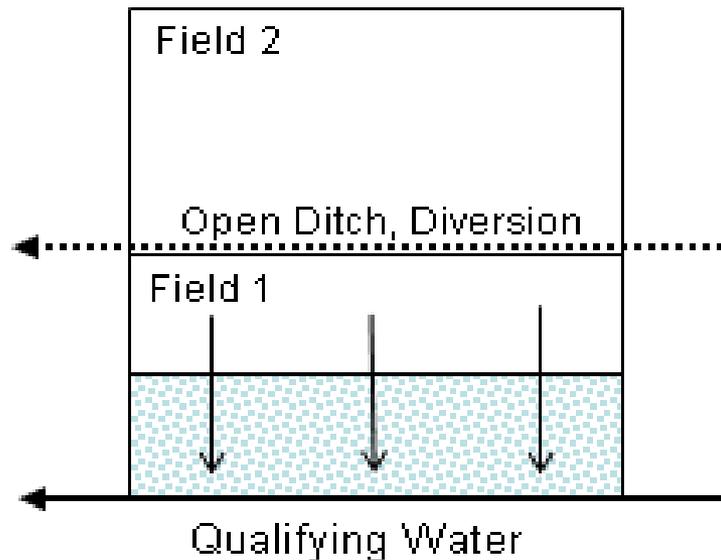


Example 1: Up to 50% of the cropland/pastureland area draining thru the buffer practice can be enrolled as a buffer.

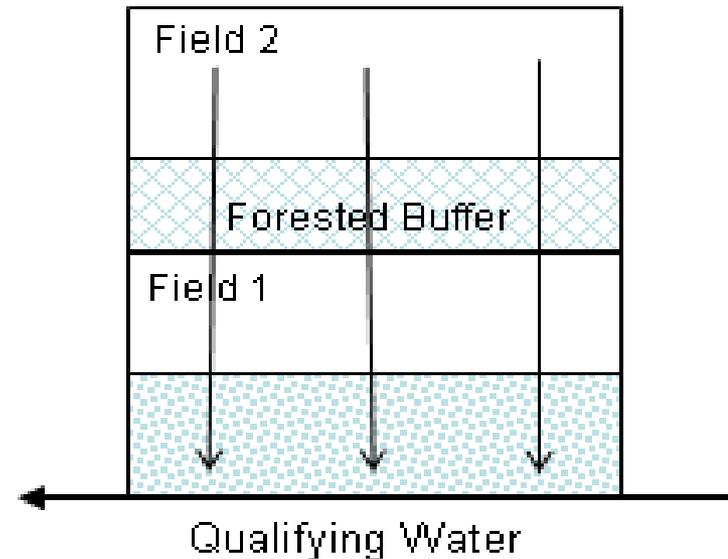


Example 2: The area draining thru the buffer may extend beyond the field boundary. In such cases, more than 50% of Field 1 may be enrolled.

Determining Buffer: Agricultural Land Ratio



Example 3: If Field 2 does not drain to the stream due to a structure or topography, then the buffer enrollment is limited to 50% of field 1.



Example 4: If Field 2 is already buffered, then the buffer enrollment is limited to 50% of field 1.

CREP Criteria CP3 Tree Planting

- Enrolled area must be cropland and form a continuous buffer to a riparian area.
- Maximum limit of 300 feet from qualifying water.
- CP3 is a cropland conversion practice; therefore, whole fields can be enrolled, up to 300 ft. limitation.
- Cover requirements
 - Must be short leaf pine species ([*Pinus echinata*](#))
 - Site/soils in enrollment area must be appropriate shortleaf pine
 - LOBLOLLY and other SYP NOT ALLOWED!!!!
- Management activities defined in Exhibit 9 (refresh firebreak)
- 10 **to** 15 year CRP contract
- 30 year or PERMANENT CREP easement

CREP Criteria CP3A Hardwood Tree Planting

- Enrolled area must be cropland and form a continuous buffer to a riparian area.
- Maximum limit of 300 feet from qualifying water.
- CP3A is a cropland conversion practice; therefore, whole fields can be enrolled, up to 300 ft. limitation.
- Cover requirements
 - Must be appropriate for soils in the enrollment area
 - Hardwood or mixture of hardwoods (Bald Cypress and/or Atlantic White Cedar may be substituted for hardwood species)
 - Longleaf (limited to approved soils list available through FSA)
- Management activities defined in Exhibit 9 (firebreak, burn longleaf; or alternative disk)
- 10 **to** 15 year CRP contract
- 30 year or PERMANENT CREP easement

CREP Criteria CP-21 Filter Strip

Enrolled area must form continuous buffer

Widths

- Min. width is 20 feet
- Maximum limit for any purpose other than water quality is 120 feet (average) from qualifying water (If needed to accomplish purpose)

CP21 is a pollutant trapping practice; therefore, pollutant source buffered must exceed or equal the practice extent (at least 1:1ratio). Generally whole fields will not be enrolled.

Sheet flow water is required.

CP21 Cover requirements

- ✓ Cover must be appropriate for soils in the enrollment area
- ✓ Cover for water quality portion must meet FOTG's (Code 393) requirements for filtering runoff
- ✓ Additional width for wildlife, if applicable, plant to native grasses/forbs best suited
- ✓ Management activities in Exhibit 9 (light disk, burn wildlife portion)
- ✓ 10 **to** 15 year CRP contract
- ✓ 30 year CREP easement

CREP Criteria CP-22 Riparian Forest Buffer

- Enrolled area must form continuous buffer to stream, riparian area
- Minimum width is controlled by 391-Riparian Forest Buffer but will not be less than 35 feet
- Maximum limit for any purpose other than water quality is 300 feet (average) from qualifying water (If needed to accomplish purpose)
- CP22 Is a pollutant trapping practice; therefore, pollutant source buffered must exceed or equal the practice extent (at least 1:1ratio). Generally whole fields will not be enrolled. Sheet flow is required.
- CP21 Filter Strip required along ditches that bisect enrolled buffer

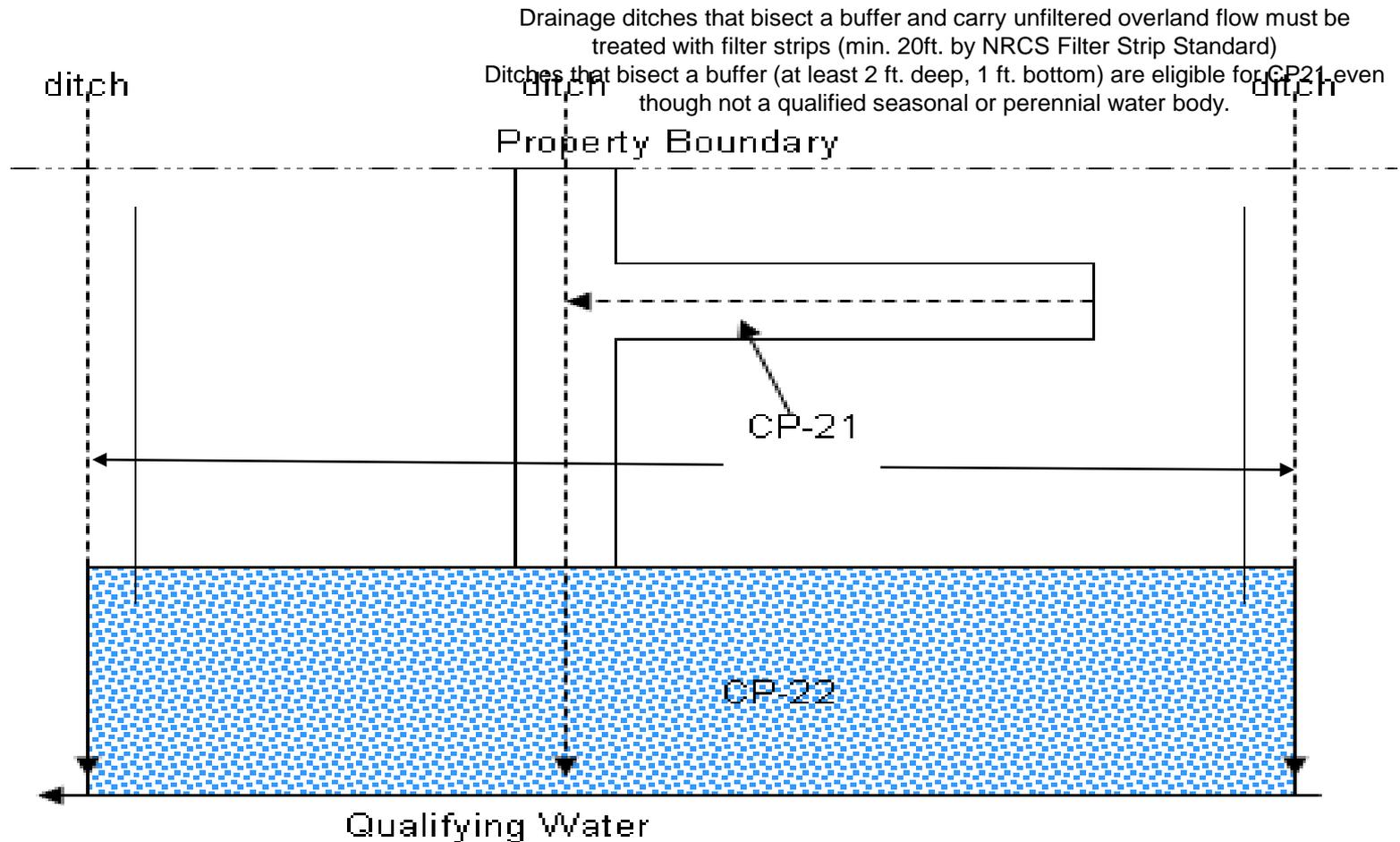
CP-22 Cover Requirements

- ✓ Zone 1 (*required*)– min. 15 ft. closest to water, but can be wider, 2 spp. deciduous trees/shrubs (*planted*)
- ✓ Zone 2 (*required*)
 - min. criteria 20 ft. beyond Zone 1 w/ at least 2 spp. tree or shrub is required by FOTG (Code 391)
 - when Zone 2 wider than 20 ft. must provide *fish and wildlife habitat* – spec. for deciduous tree/shrub at least 50% of stand is required by FOTG (Code 391)
- ✓ Zone 3 (*optional*) – filter strip (just like CP21) to disperse concentrated flow

Other CP22 Requirements

- ✓ Hydrology restoration must be addressed (solid tile lines...) Use Form.
- ✓ Management activities in Exhibit 9 (light disk, burn native grass in zone 3)
- ✓ 10 **to** 15 year CRP contract
- ✓ 30 year or PERMANENT CREP easement

Filter Strips Needed on Ditches that Bisect Riparian Forest Buffers



Drainage ditches that bisect a buffer and carry unfiltered overland flow must be treated with filter strips (min. 20ft. by NRCS Filter Strip Standard)

Ditches that bisect a buffer (at least 2 ft. deep, 1 ft. bottom) are eligible for CP-21, even though not a qualified seasonal or perennial water body.

Property Boundary

CP-21

CP-22

Qualifying Water

'Restoration' of Hydrology in Riparian Buffers

- Include a 'CREP Hydrologic Restoration Assessment' form completed by the planner in case file
- Hydrologic 'restoration' applies to enrolled areas (or parts) that are poorly or somewhat poorly drained soils.
- 'Restoration' practices CANNOT negatively impact agricultural use of un-enrolled areas...however water table under adjacent areas MAY be raised during parts of the year
- 'Restoration' involves both surface and subsurface water
 - Surface Water – Ensure sheet flow through the buffer to increase infiltration and pollutant trapping. Filter Strip or Shaping Upslope?
 - Subsurface – Replace perforated tile with SOLID tile where subsurface drains pass through buffer. *Water Table Control* on CP-22 should be considered. Technical issues are being evaluated and training guidance will be provided. There could be some extensive on-site analysis required in some cases.

CREP Criteria CP-23 Wetland Restoration

- Enrolled area must form continuous buffer
- Must be in 100yr floodplain and meet 51% hydric
- CP23 may extend to the edge of hydric soils where enrollment area is substantially hydric
- 750 ft. from qualifying water if enrollment area includes predominantly hydric soils
- Non Riparian wetlands may be enrolled but must limit pulses of freshwater into primary nursery areas; OR, filter water associated with agricultural drainage ditches
- Hydrologic restoration to the greatest extent practical.
- Up to 3:1 uplands may be enrolled if necessary for full ecological functioning
- Cover must be trees
- Management Activities (water table control)
- 10 to 15 year CRP contract
- PERMANENT CREP easement REQUIRED

CREP Criteria CP-23A Wetland Restoration, Non-Floodplain

- Enrolled area must form continuous buffer
- CP23A may extend to the edge of hydric soils where enrollment area is substantially hydric
- 750 ft. from qualifying water if enrollment area includes predominantly hydric soils
- Non Riparian wetlands may be enrolled but must limit pulses of freshwater into primary nursery areas; OR, filter water associated with agricultural drainage ditches
- Up to 4:1 acres of uplands may be enrolled if necessary for full ecological functioning
- Cover must be trees
- Management Activities (water table control)
- 10 to 15 year CRP contract
- PERMANENT CREP easement REQUIRED

CREP Criteria CP31 Bottomland Timber Est. on Wetland

- Enrolled area must be cropland, form a continuous buffer to a riparian area, and *“be within the recognized 100-year flood plain for a river or stream with permanent flow”*
- Maximum limit of 300 feet from qualifying water.
- CP31 is a cropland conversion practice; therefore, whole fields can be enrolled, up to 300 ft. limitation.
- Cover requirements
 - Must be appropriate for soils in the enrollment area
 - 3 hardwood species required, natural regeneration by nuts/seed not allowed
 - SYP, Softwoods NOT ALLOWED!!!!
- Management activities - none
- 10 to 15 year CRP contract
- 30 year or PERMANENT CREP easement

Conservation Reserve Enhancement Program



*Spirited discussion and
questions...*