



United States
Department of
Agriculture

Natural Resources Conservation Service

NRCS Ag BMP Crediting

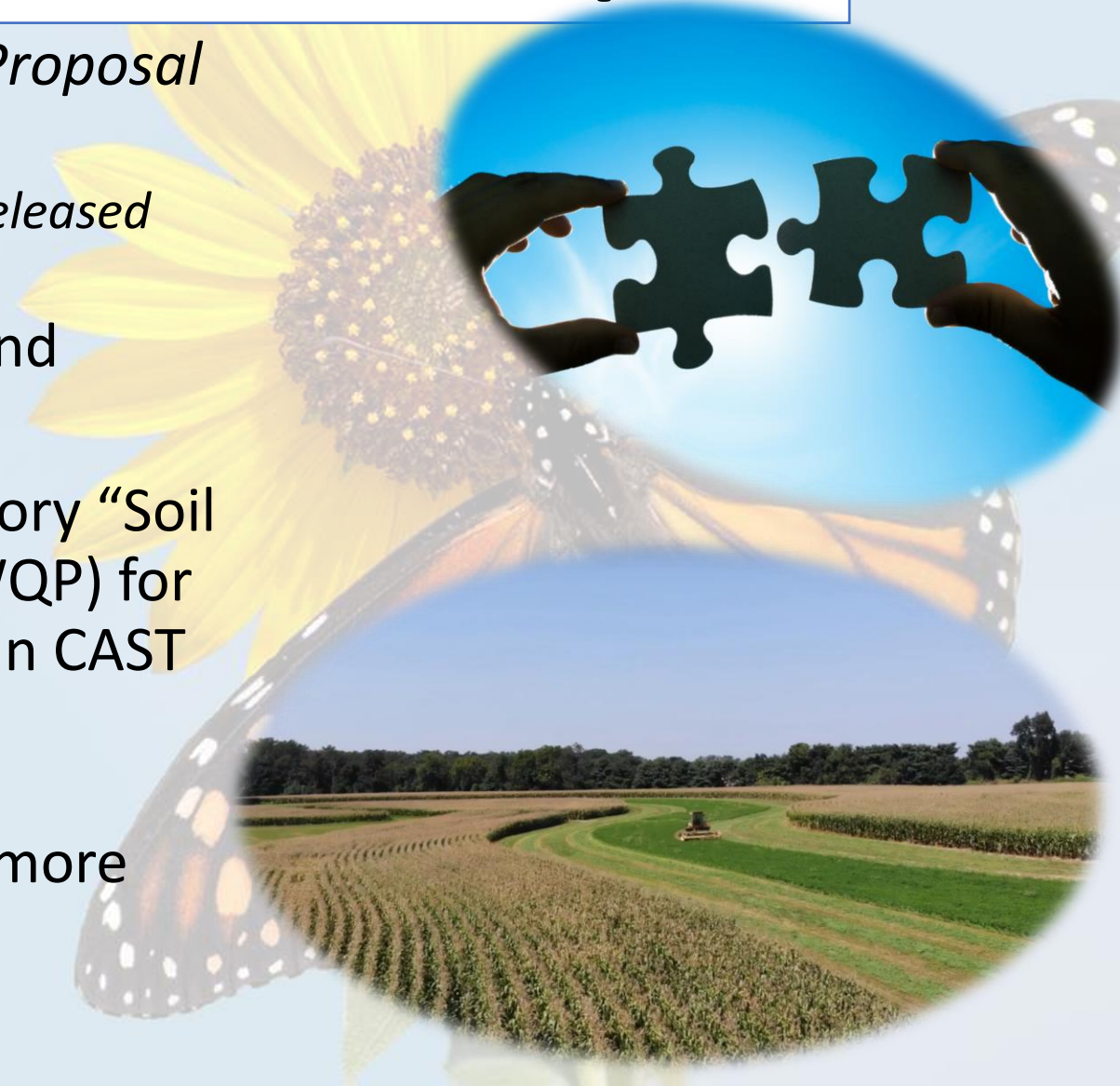
NEIEN Appendix Proposal- POST WTWG

Agriculture Workgroup

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September 15, 2022

May 2022 AgWG Decision: **NEIEN Appendix- Crosswalk Proposal**

- See “NRCS - NEIEN Appendix Status Update Proposal May 2022- Amended” document (pdf file)
 - 15 practices proposed for change from draft to released
- These practices have a benefit in sediment and nutrient reduction.
- These practices assigned to CAST BMP Category “Soil Conservation and Water Quality Plans” (SCWQP) for lack of a more accurate reduction efficiency in CAST
 - Catch all category based on current research
- Proposed change is a step on a path toward more fully crediting voluntary conservation implementation.



May 2022 AgWG Decision: NEIEN Appendix- Crosswalk Proposal

- The change would result in BMPs being eligible for Phase 6 Soil Conservation and Water Quality Plan (SCWQP) Nitrogen, Phosphorus, and Sediment reductions, if counted as individual practices
 - Nitrogen: 3%, 5%, or 8%
 - Phosphorus: 5%, 10%, or 15%
 - Sediment: 8%, 14%, or 25%

**Efficiencies are for the S&W Conservation Plan BMP from the Simpson and Weammert Report and vary by land use.*

NRCS-CAST NEIEN "Draft" BMPs	Phase 5 CAST BMP Representation
Brush Management (ac)	Soil Conservation and Water Quality Plans
Conservation Crop Rotation (ac)	Soil Conservation and Water Quality Plans
Contour Buffer Strips (ac)	Soil Conservation and Water Quality Plans
Contour Farming (ac)	Soil Conservation and Water Quality Plans
Diversion (ft)	Soil Conservation and Water Quality Plans
Grade Stabilization Structure (no)	Soil Conservation and Water Quality Plans
Hedgerow Planting (ft)	Soil Conservation and Water Quality Plans
Irrigation System, Microirrigation (ac)	Soil Conservation and Water Quality Plans
Irrigation Water Management (ac)	Soil Conservation and Water Quality Plans
Lined Waterway or Outlet (ft)	Soil Conservation and Water Quality Plans
Shallow Water Development and Management (ac)	Soil Conservation and Water Quality Plans
Stream Habitat Improvement and Management (ac)	Soil Conservation and Water Quality Plans
Stripcropping (ac)	Soil Conservation and Water Quality Plans
Subsurface Drain (ft)	Soil Conservation and Water Quality Plans
Terrace (ft)	Soil Conservation and Water Quality Plans
Underground Outlet (ft)	Soil Conservation and Water Quality Plans
Water and Sediment Control Basin (no)	Soil Conservation and Water Quality Plans

The Original Decision: WTWG June 2015

NRCS-CAST NEIEN "Draft"	
BMPs	Ph
Brush Management (ac)	So
Conservation Crop Rotation (ac)	So
Contour Buffer Strips (ac)	So
Contour Farming (ac)	So
Diversion (ft)	So
Grade Stabilization Structure (no)	So
Hedgerow Planting (ft)	So
Irrigation System, Microirrigation (ac)	Se
Irrigation Water Management (ac)	Se
Lined Waterway or Outlet (ft)	So
Shallow Water Development and Management (ac)	So
Stream Habitat Improvement and Management (ac)	So
Stripcropping (ac)	So
Subsurface Drain (ft)	So
Terrace (ft)	So
Underground Outlet (ft)	So
Water and Sediment Control Basin (no)	So

- Individual practices that were mapped to the Conservation Plan BMP in the Phase 5 NEIEN appendix were moved from “Released” to “Draft” during the transition from the Phase 5 to the Phase 6 NEIEN Appendix in June 2015.

Why?

- These BMPs **were over-reported** in the Phase 5 Model calibration as **multiple BMPs treat the same acre of land**.
- In reality these multiple BMPs are **part of one holistic BMP: Soil and Water Quality Conservation Plans**.

What did this change?

These **individual practices would now be reported** as the CBP S&W Conservation Plan BMP.

What issue did the June 2015 decision create?

- **Unit conversion issues:** *The CBP S&W Conservation Plan BMP is reported/credited in Acres.*

Example from Delaware

BMP	Amount	Unit
Comprehensive Nutrient Management Plan	389.5	NO
Cisterns & Rain Barrels	39.0	Number
Comprehensive Nutrient Mgt Plan	31.0	Number of Plans
Conservation Crop Rotation	142,012.6	Acres
Hedgerow Planting	82,101.0	Feet
Irrigation System, Microirrigation	79.3	Acres
Irrigation Water Conveyance, Pipeline, High-Pressure, Underground, Plastic	1,195.0	Feet
Irrigation Water Management	15,668.8	Acres
Underground Outlet	427.0	Feet
Water and Sediment Control Basin	1.0	Number

Definitions: **NRCS** versus the **Bay Program**

NRCS Conservation Plan

- A **record of the client's decisions** and supporting information for treatment of a unit of land for **one or more identified natural resource concerns** as a result of the planning process.
- Conservation plans document a schedule of conservation activities and supporting information; and are developed and implemented to protect, conserve, or enhance natural resources within the client's social and economic interests and abilities.

NRCS Conservation System

- A combination of one or more **conservation measures or management practices**. When applied to the land, the conservation system will bring either a **substantial reduction in soil erosion** or, in the case of land converted from native vegetation, allow for no substantial increase in soil erosion.
- *Designed to meet HELC conservation plan requirements.*

CBP S&W Conservation Plan

A combination of practices (a suite of BMPs), other than conservation tillage or no-till, that **reduces soil loss to or below tolerance** (defined as the maximum amount of erosion at which the quality of a soil as a medium for plant growth can be maintained).

CONSERVATION PLANNING:
FIELD AND PASTURE EROSION CONTROL PRACTICES
Definition and Nutrient and Sediment Reduction Effectiveness Estimates

For use in calibration and operation of the
Chesapeake Bay Program's Phase 5.0 Watershed Model

Synthesis by

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CBP Definition:

Which Practices are included under the S&W Conservation Plan BMP

(Conservation Planning: Field and Pasture Erosion Control Practices)

NRCS-CAST NEIEN "Draft"	
BMPs	Ph
Brush Management (ac)	So
Conservation Crop Rotation (ac)	So
Contour Buffer Strips (ac)	So
Contour Farming (ac)	So
Diversion (ft)	So
Grade Stabilization Structure (no)	So
Hedgerow Planting (ft)	So
Irrigation System	
Microirrigation (ac)	So
Irrigation Water Management (ac)	So
Lined Waterway or Outlet (ft)	So
Shallow Water Development and Management (ac)	So
Stream Habitat Improvement and Management (ac)	So
Stripcropping (ac)	So
Subsurface Drain (ft)	So
Terrace (ft)	So
Underground Outlet (ft)	So
Water and Sediment Control Basin (no)	So

- Access Road (560)
- Alley Cropping (311)
- Animal Trails and Walkways (575)
- ~~Conservation Cover (327)~~
- Conservation Crop Rotation (328)
- Contour Buffer Strips (332)
- Contour Farming (330)
- Critical Area Planting (342)
- ~~Diversion (362)~~
- Field Border (386)
- Filter Strip (393)
- Grade Stabilization Structure (410)
- ~~Grassed Waterway (412)~~
- Lined Waterway or Outlet (468)
- Residue Management, Seasonal (344)
- Rock Barrier (555)
- Row Arrangement (557)
- ~~Sediment Basin (350)~~
- Stripcropping (585)
- ~~Structure for Water Control (587)~~
- Terrace (600)
- Underground Outlet (620)
- Water and Sediment Control Basin (638)
- ~~Windbreak/Shelterbelt Establishment (380)~~

CBP Definition:

Which Practices are included under the Conservation Plans BMP

(Conservation Planning: Field and Pasture Erosion Control Practices)

- Access Road (560)
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Already Reported as
Barnyard Runoff Control,
Grass Buffers, and Tree
Planting.



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How do States Report the CBP S&W Conservation Plan BMP?

- Some jurisdictions are reporting total conservation plan acres, but others are reporting individual practices.
- Jurisdictions were previously able to query and acquire watershed specific planning and implementation data and acres from a website that has transitioned

NRCS Data Sources Websites

- [\(RETIRED\) Performance Results System \(PRS\) – Used for conservation planning acres reports. Allowed data query by HUC12](#)
 - Allowed for data query by HUC12
- [RCA Data Viewer | NRCS \(usda.gov\)](#)
 - Only allows for statewide data

***Working hyperlinks**





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Which States report the CBP Soil & Water Conservation Plan BMP?

Pennsylvania	565,430	Acres
Virginia	8,929	Acres
New York	189,076	Acres
Maryland	824,578	Acres
Delaware	130,369	Acres

Key Concerns raised at the August 2022 WTWG

- **The CBP S&W Conservation Plan BMP is defined by a combination of practices.**
 - *If the S&W Conservation Plan is equivalent to an individual practice, would the definition from the Simpson and Weammert report need to change?*
- **The efficiencies in the Simpson and Weammert report were evaluated as a combination of practices.**
 - *What efficiencies would be assigned to the individual practices if the WTWG were to approve the proposal to reverse the Phase 6 NEIEN Appendix decision?*
- **Reporting both SWCP AND individual practices would lead to more cutoff in the model, meaning practices would not be credited because there is not enough land available in the model.**
 - *If the May 2022 proposal is approved, should states need to choose whether to report SWCP OR individual practices?*
- **Keeping the June 2015 decision means a guidance needs to be developed for how to crosswalk (the units of) each practice to the CBP SWCP BMP.**
 - *Example: Feet of hedgerow planting to acres of S&W Conservation Plan.*



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Options to Move Forward

Natural Resources Conservation Service

1. **Move forward with the Proposal from May 2022:** Confirm that the **efficiencies of the individual practices under the CBP S&W Conservation Plan are the same as the efficiency for a combination of practices** (efficiencies developed in the Simpson and Weammert Report).
2. **Move forward with the Proposal from May 2022:** Develop **new efficiencies** for the individual practices under the S&W
3. **Keep the June 2015 Decision:** Inform the unit conversions states need in order to report individual practices as the CBP S&W Conservation Plan and **develop a guidance for reporting these practices.**

