



**State Technical Committee
AGENDA
Tuesday, January 29, 2019**

- 1:00 Welcome – Denise Coleman, State Conservationist
- 1:10 Conservation Innovation Grant Presentation:
“Retrofitting the Roadside Ditch Network to Treat Nitrogen from Agricultural Runoff using Woodchip Bioreactors in Bradford County PA” – Eric Hafen Chase, Researcher, Center for Dirt and Gravel Road Studies, Larson Transportation Institute, Penn State University
- 1:45 NRCS Technical Guide Report:
- Dan Dostie, State Resource Conservationist
 - Pete Vanderstappen, State Engineer
 - Yuri Plowden, State Soil Scientist
- 2:00 Financial Programs Report:
- EQIP and National Water Quality Initiative – Ed Sanders
 - CSP and CIG – Noel Soto
 - Highly Erodible Land and Wetland Compliance – Jim Gillis
- 2:45 Easement Programs Report – Hathaway Jones
- 3:15 Regional Conservation Partnership Program Report – Susan Marquart
- 3:30 Committee Input: Do the State Technical Committee members have any suggestions for topics or agenda items for future meetings?
- 4:00 Next State Technical Committee Meeting Thursday, April 18, 2019

Dates for 2019 State Technical Committee Meetings:

Thursday, April 18, 2019

Tuesday, July 16, 2019

Wednesday, October 16, 2019

Listen in/participate by calling:

Toll free 888-844-9904

Access Code: 6941559



State Technical Committee

January 29, 2019

Meeting Notes

Denise Coleman, Natural Resource Conservation Service (NRCS) opened the meeting promptly at 1pm due to the inclement weather conditions, persons in actual attendance would be limited, so copies of all presentations and hand-outs were sent to all members electronically so they could participate by using the Call-In Toll-free conference number. She did a roll call of those who had called in and of those physically present at the meeting. It should be noted that 16 members were on the conference call and 12 members in the room for a total of 28 participating. Denise commented on the 2018 Farm Bill being passed. She explained that there were no talking points presently available concerning the new Farm Bill, but that they are forthcoming. She went on to introduce Mr. Eric Chase from Penn State University researcher, Center for Dirt and Gravel Roads, who delivered a presentation on one of our current Conservation Innovation Grant (CIG) projects.

Eric Chase (Penn State University), made a very informative presentation concerning "Retrofitting the Roadside Ditch Network to Treat Nitrogen from Agricultural Runoff using Woodchip Bioreactors in southwest Bradford County, PA." (See attached hand-out) Eric explained exactly what the purpose of a "Woodchip Bioreactor" was, how and where it is constructed, how it functioned and how it performed its' mission in conservation for our environment. He noted that this project was new to Pennsylvania. The expected outcomes of the project are: Quantification of total nitrogen reduction and cost per pound of nitrogen removed using in-ditch bioreactors; define parameters where use of in-ditch woodchip bioreactors can be successful; establish the knowledge needed to enhance NRCS Denitrifying Bioreactor Standard (605); Establish data to show road ditch infrastructure can be used as a watershed-wide nutrient removal system.

Retrofitting roadside ditches with woodchip bioreactors

USDA - Conservation
Innovation Grant



Natural Resources Conservation Service



PennState
Center for Dirt and Gravel Road Studies

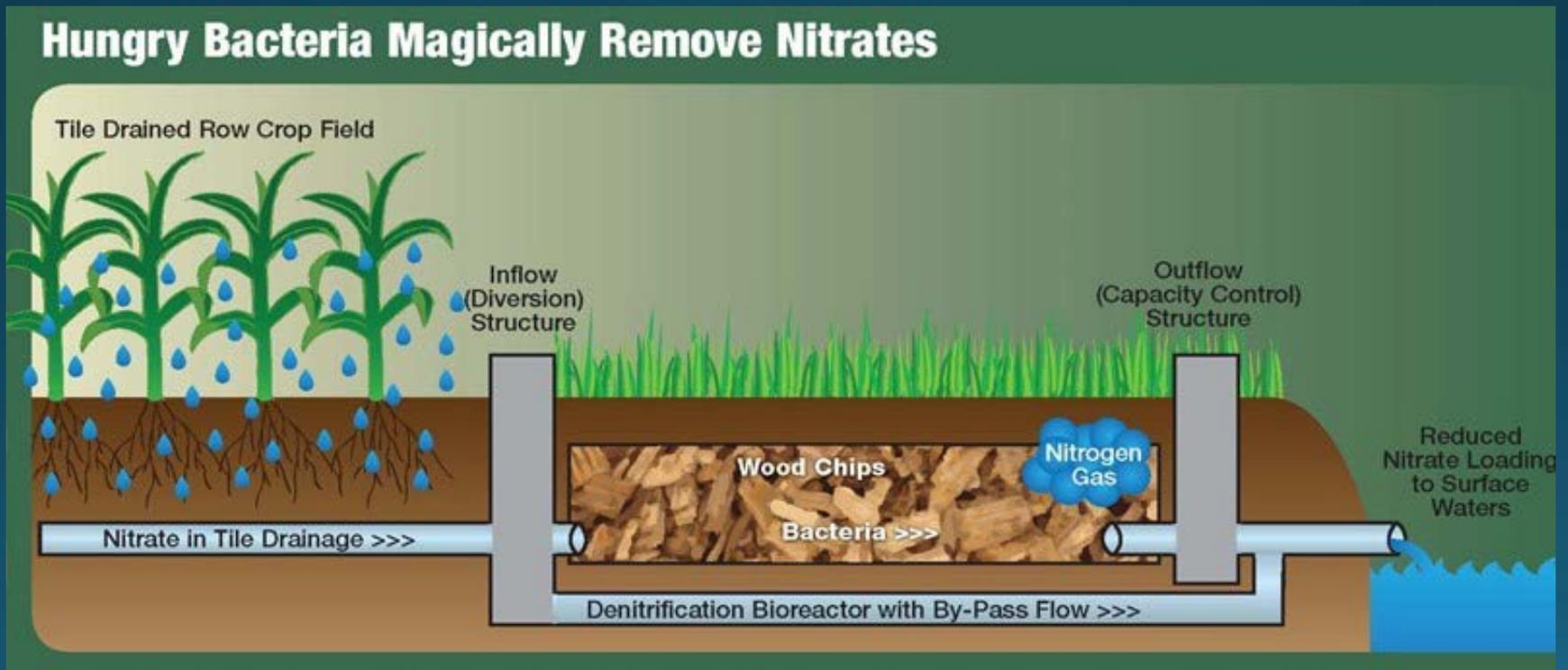


Cornell University

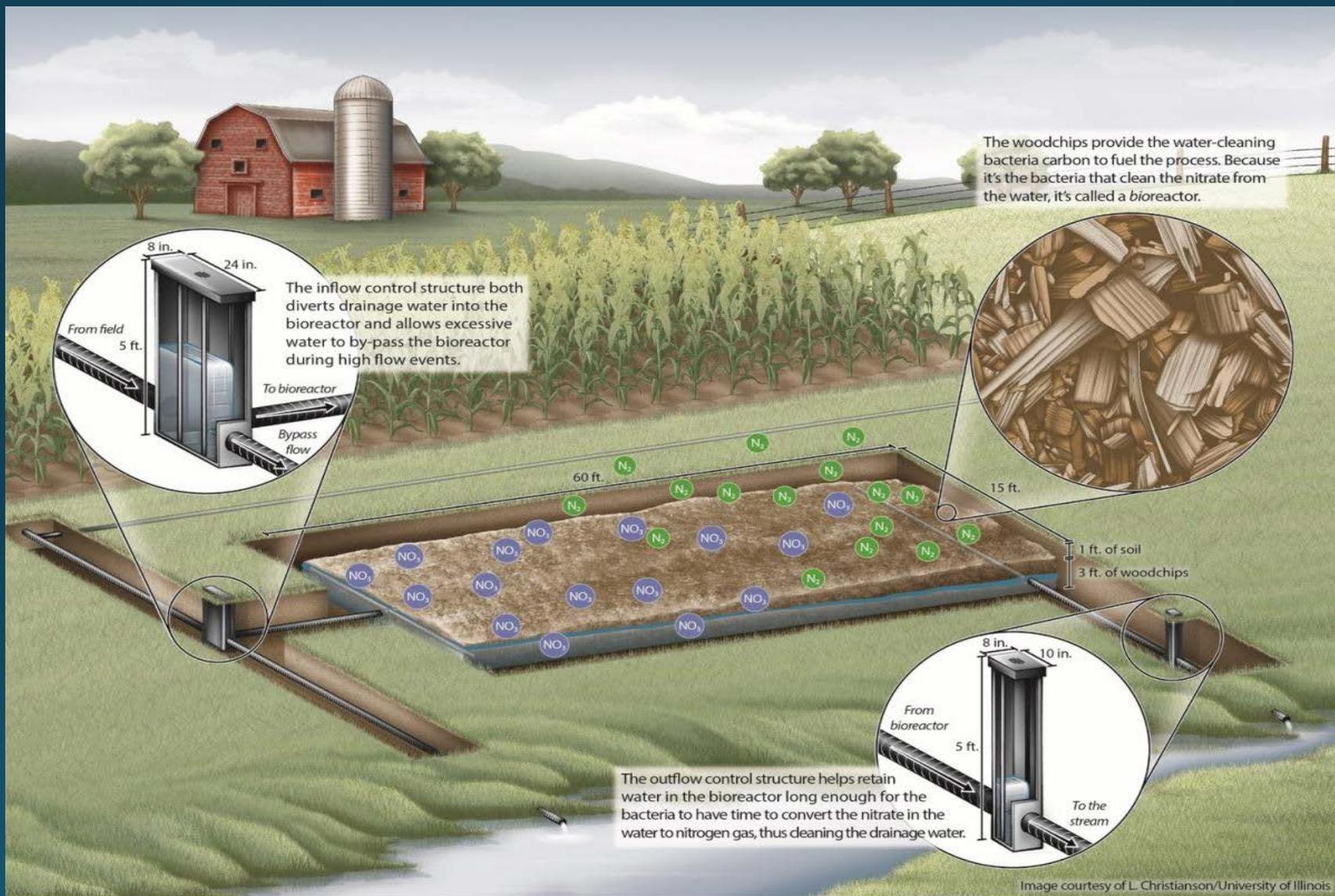


What is a woodchip bioreactor?

- Woodchips serve as a substrate for bacteria that break down nitrate through denitrification
- Nitrogen gas is released into atmosphere.
- Best performance in low DO environment



Common woodchip bioreactor design



Conservation Practice Standard 605 - Denitrifying Bioreactor



Characteristics of Denitrifying Bioreactors

- Organic last line of defense against subsurface nitrates;
- Removes 35-50 percent of nitrates from water flowing through it;
- Relatively inexpensive to install and maintain;
- No adverse effects on crop production or drainage.

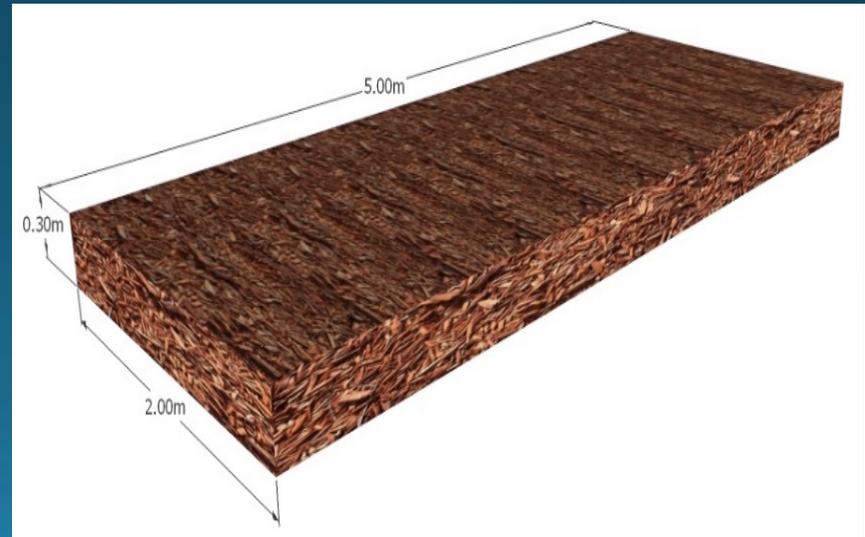
Does topography and farm size lend itself to installation of on-field bioreactor??



Images Courtesy USDA

Overview of in-ditch woodchip bioreactors

- Use roadside ditches (existing infrastructure) to treat nitrogen in field runoff rather than on-field treatment
- Low-cost woodchip “socks” retrofitted in existing ditch
- Easy to install and remove
- Previous work in 2016 showed 40% removal of nitrogen



Project located in Canton Twp, Bradford County, PA



© 2017 WaterproofPaper.com

Ditch drains
approximately 50
acres of cropland

Towanda Creek
Watershed –
Tributary to the
Susquehanna River



Project Goals

Overall Project goal:

Evaluate potential of installing scaled-down woodchip bioreactors into **existing roadside ditches** for filtering dissolved nitrogen from ag activities

Specific objectives:

- Evaluate the effectiveness of bioreactors in series to increase nitrate removal from ditch water
- Evaluate possible environmental factors (ex. temperature, flow rate) on performance
- Test ways to increase hydraulic retention time

Basic Project Methods

- Identify suitable location for installation of bioreactor
- Address roadwork needed to reduce excess sediment and flow from the road entering the ditches
- Install two bioreactors in series
- Monitor nitrogen concentrations above, between, and below bioreactors

Roadwork

- Reduce sediment from the road entering the ditches
- Reduce overall flow volume entering the bioreactors
- Increase overall efficiency and lifespan of bioreactors



Bioreactor Construction

- The bioreactor media consisted of coarse hardwood woodchips (~2-4 cm), aged for several months
- 1/4-inch polyester debris netting laid in the ditch bottom
- fill with wood chips and lock edges with cable ties
- held in place by six rebar



Sensors

- Automated ISCO sample
- Pressure transducers
- Temperature sensor
- Rain gage



Bioreactor Sampling Methods

- 11 grab samples collected above, between, and below bioreactors
- Automated samplers captured 7 complete or partial storm events
- Samples tested for pH, electrical conductivity, nitrate+nitrite, total phosphorus
- Water depth and temperature logged continuously



Challenges

Rain!

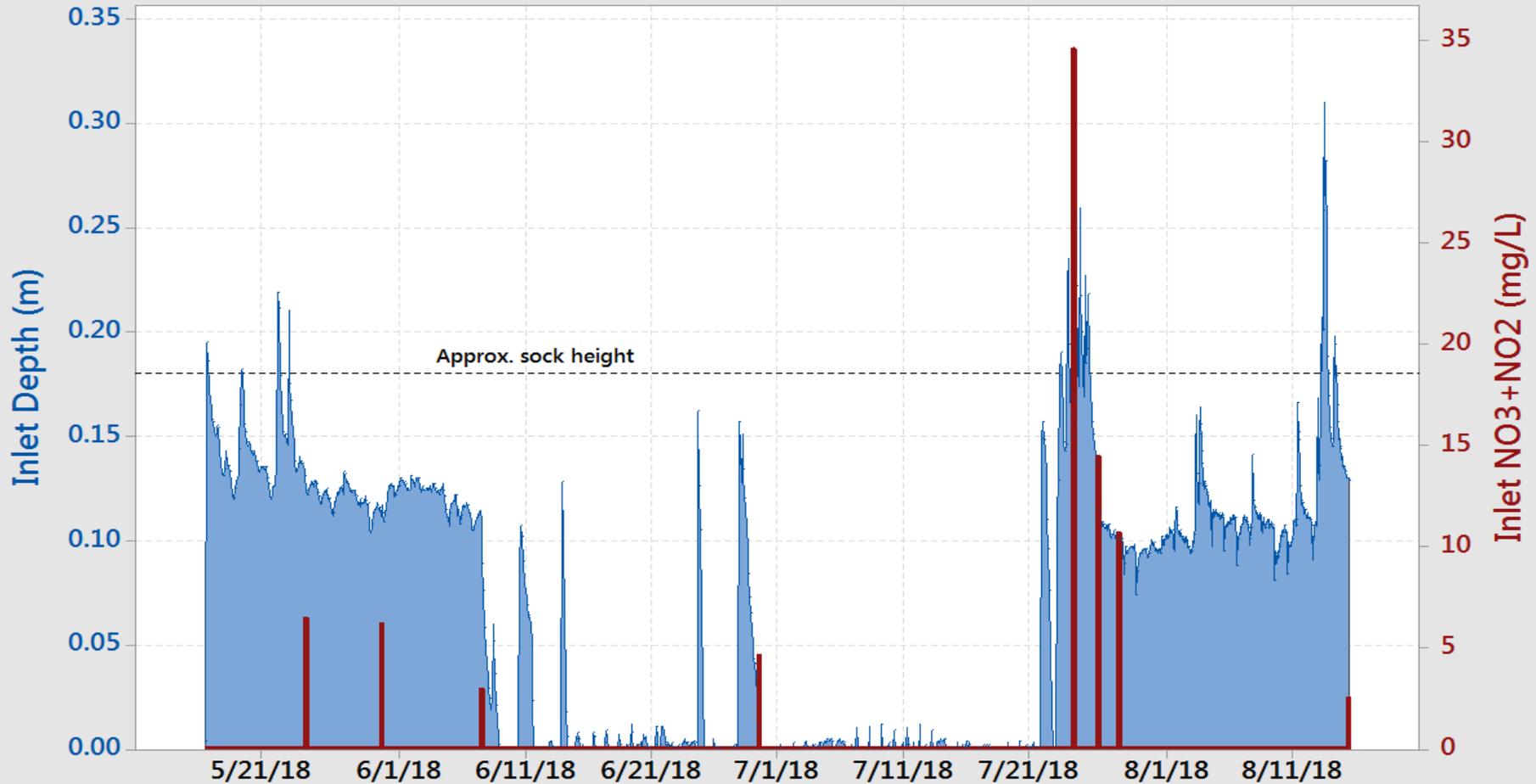


Preliminary results

- In-ditch woodchip bioreactors are a viable option to treat agricultural field runoff for nitrogen
- Removal rates ranging from 0% to 100%.
- High flows/overtopping reduced efficiency of removal



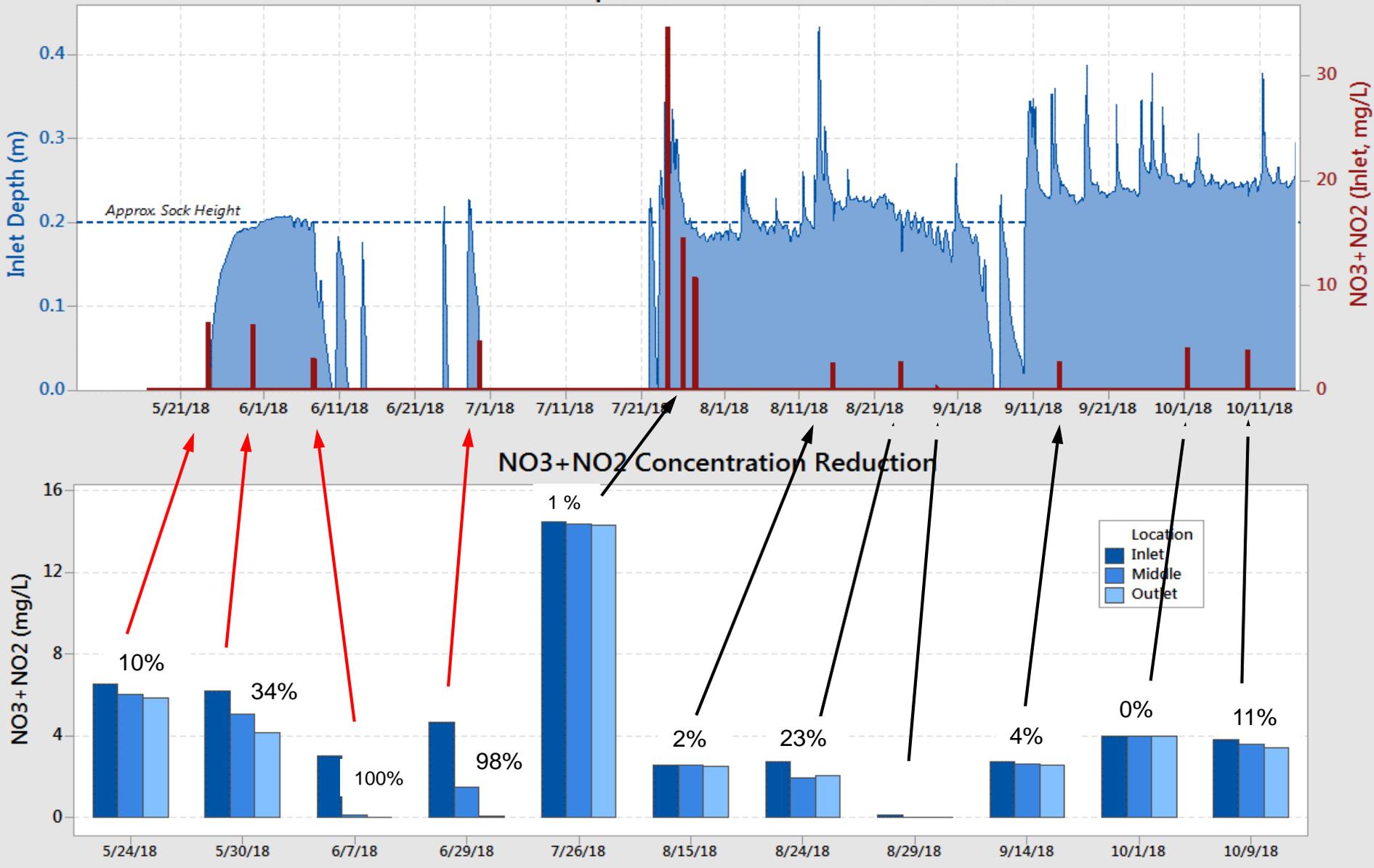
Inlet Water Depth and Nitrate Concentration



Water flows and nitrate levels entering the bioreactor system.

(Note wide range of nitrate concentrations)

Water Depth and NO3+NO2 Concentration



Changes in nitrate concentrations thru bioreactor, with filtering efficiencies.

Performance Considerations

- Contact time
- Temperature
- Extended periods of drought
- Aerobic conditions

Design/Install Considerations

- Ditch slope and depth
- Size of bioreactor vs. watershed area



Additional sampling in 2019

- Further quantify the efficiency of nitrogen removal and determine cost effectiveness
- Determine the influence of temperature on nitrogen removal efficiency during the early and late growing season

Exploration of retention time (Harrington Road):

- Single sock installed
- no nitrate in water samples
- evaluating effect of check “dam” on hydraulic retention time

Expected Outcomes

- Quantification of total nitrogen reduction and cost per pound of nitrogen removed using in-ditch bioreactors
- Define parameters where use of in-ditch woodchip bioreactors can be successful
- Establish the knowledge needed to enhance NRCS Denitrifying Bioreactor Standard (605)
- Establish data to show road ditch infrastructure can be used as a watershed-wide nutrient removal system

Acknowledgements:

We would like to thank the USDA's Conservation Innovation Grant Program (agreement 69-2D37-18-007), the Pennsylvania State Conservation Commission, and the Bradford County Conservation District for supporting the project. Additionally we want to thank Canton Township and adjacent landowners for allowing us use of their roads and ditches for this study.



Contacts



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Dan Dostie (NRCS), State Resource Conservationist, gave a presentation entitled "NRCS Technical Guide Report" (See attached hand-out). It was an overview of the major changes to the Technical Guide initiated since our October 2018 meeting. Dan provided a Conservation Planning/Ecological Sciences update, in which he announced: TGN 271 Planning Guidance Update; TGN 270 NRCS CPA 52 Environmental Evaluation Update; TGN 268 Implementation Requirements for Forest Stand Improvement (666) and Tree/Shrub Establishment (612). He went on to explain the contents of each of the Technical Guide Notices (TGN).



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Pennsylvania
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NRCS Technical Guide Report

Dan Dostie, SRC, Yuri Plowden, SSS, Pete Vanderstappen, SCE

January 29, 2019

Natural
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nrcs.usda.gov/

Changes since STC meeting 10.19.2018

INDEX OF PENNSYLVANIA FIELD OFFICE TECHNICAL GUIDE NOTICES				
No.	DATE	SECTION	NOTICE OF CHANGE (PURPOSE)	STATE CONSERVATIONIST
271	1/14/2019	III	This notice releases the updated PA Conservation Planning Guidance document.	Denise Coleman
270	12/12/2018	III	This notice transmits the PA NRCS-CPA-52 template updated to reflect current NEPA citations.	Denise Coleman
269	12/12/2018	II	This notice transmits release of the revised Classification of Conservation Practice Effects on Cultural Resources, CRRW, and guidance.	Denise Coleman
268	12/6/2018	IV	Implementation Requirements for Forest Stand Improvement (666) and Tree & Shrub Establishment (612), Tree and Shrub Establishment Planting Rate Table and Calculator	Denise Coleman
267	9/27/2018	III	Concentrated Livestock Area Guidance Exhibit 5 REVISION, Size Requirements for Heavy Use Areas by Animal Type and Weight, Exhibit 5, Size Requirements for Heavy Use Areas by Animal Type and Weight, Supplement 5, Standard Animal Weights Pennsylvania Act 38 Nutrient Management Program/ Technical Manual reference	Denise Coleman



FIELD OFFICE TECHNICAL GUIDE



Welcome to NRCS Field Office Technical Guide (FOTG)

Select a state for documents.

State:

<https://efotg.sc.egov.usda.gov/#/>

Last month we talked about a new look

Field Office Guide Technical Guide NOTICES

Documents (4)

Document Title	Type	Pub Date	Subject	Keywords	Abstract	Size (kB)	Actions
Technical Guide Notice 268		2018-12-6	Forestry and Agroforestry	"tree/shrub establishment planting rate calculator", "implementation requirements"	This notice transmits updates to the FOTG, Section IV, for PA612 Tree/Shrub Establishment and PA666 Forest Stand Improvement.	571	

Every document now has required metadata . . .

Document Details ×

Display Title:
Technical Guide Notice 268

URL:

Abstract:
This notice transmits updates to the FOTG, Section IV, for PA612 Tree/Shrub Establishment and PA666 Forest Stand Improvement.

Point of Contact:
State Resource Conservationist

Keywords (separate with a comma: "water erosion"):
"tree/shrub establishment planting rate calculator", "implementation requirements"

Author(s):
Peter Hoagland

Publication Date: 2018-12-6 **STGC Review Date:** 2018-12-6

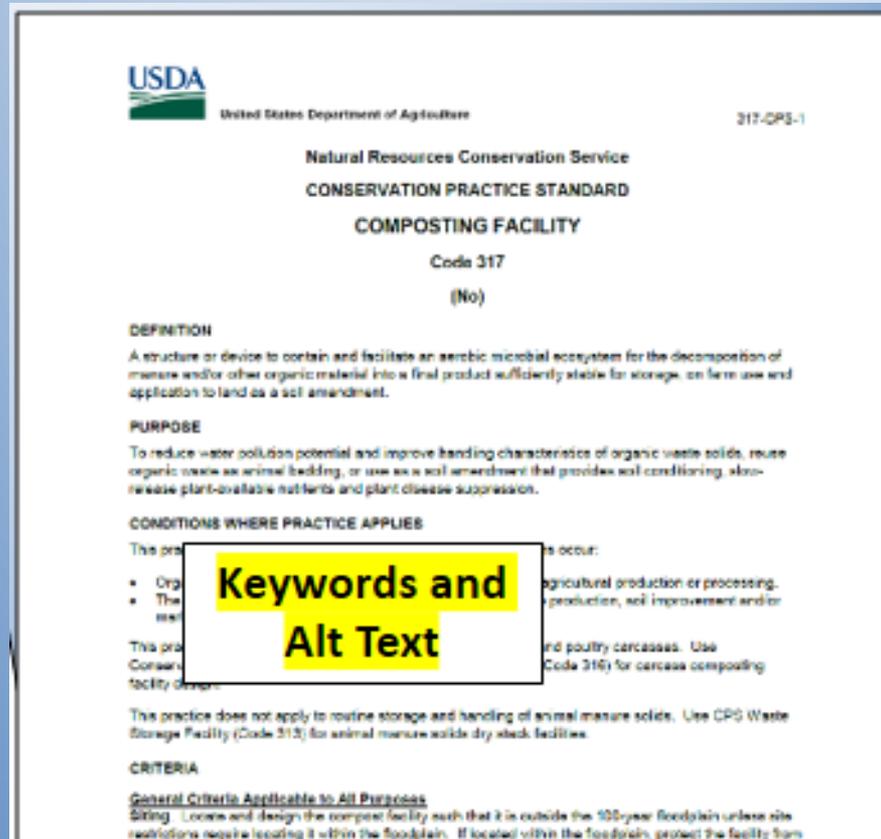
Practice:
612

Document Type:
Other

Subject(s):
Forestry and Agroforestry



To help Screen Readers find and READ documents . . .



Priority is Section IV . . .

Picking away at documents in other sections

Updating content publishing process for new documents

Close to 4,000 documents in the NRCS PA FOTG alone

A horizontal banner image showing a rural landscape. On the left, there is a field of green corn. In the center, there are rolling green hills under a blue sky with white clouds. On the right, the lower legs and hooves of several horses are visible, grazing in a grassy field.

Conservation Planning/Ecological Sciences Update

- TGN 271 Planning Guidance Update
- TGN 270 NRCS CPA 52 Environmental Evaluation Update
- 268 Implementation Requirements for Forest Stand Improvement (666) and Tree/Shrub Establishment (612)

A horizontal banner image showing a rural landscape. On the left, there are green corn plants. In the center, a dark horse is grazing. On the right, the legs of several other horses are visible. The background shows a green field and a blue sky with white clouds.

Conservation Planning/Ecological Sciences Update

- TGN 271 Planning Guidance “Checklist” Update
 - Pasture Condition Score is required on the pasture land use.
 - A reference to WEPP (Water Erosion Prediction Program) is included and at the time of this notice, RUSLE2 is still the tool used to estimate sheet and rill erosion.
 - The land use definition for Forest has been updated.

A horizontal banner image showing a rural landscape. On the left, there is a field of green corn. In the center, there are rolling green hills under a blue sky with white clouds. On the right, the lower legs and hooves of several horses are visible, grazing in a grassy field.

Conservation Planning/Ecological Sciences Update

- 
- A horizontal banner image showing a rural landscape. In the foreground, there are several black and white cows grazing. In the background, there is a body of water reflecting the sky and surrounding greenery.
- TGN 270 NRCS CPA 52 Environmental Evaluation Update
 - The PA NRCS-CPA-52 state level templates, with and without guide sheets have been updated to reflect current NEPA Citations.
 - The only change to the templates are the dropdown options in "Section R.1 Findings Documentation."
 - The PA NRCS-CPA-52 Example has also been updated to reflect current NEPA Citations.

A horizontal banner image showing a rural landscape. On the left, there is a field of green corn. In the center, there are rolling green hills under a blue sky with white clouds. On the right, the lower legs and hooves of several horses are visible, grazing in a grassy field.

Conservation Planning/Ecological Sciences Update

- 
- A horizontal banner image showing a rural landscape. In the foreground, there are several black and white cows grazing. In the background, there is a calm pond reflecting the sky and surrounding greenery.
- 268 Implementation Requirements for Forest Stand Improvement (666) and Tree/Shrub Establishment (612)
 - Tree/Shrub Establishment PA 612 - The Tree/Shrub Establishment Implementation Requirements sheet has been updated and a Tree/Shrub Establishment Planting rate calculator has been developed for Pennsylvania.
 - Forest Stand Improvement PA 666 - The newly developed Forest Stand Improvement Implementation Requirements sheet has been released.

Yuri Plowden (NRCS), State Soil Scientist was introduced by Dan and presented information on NRCS the Field Office Technical Guide (FOTG) (See attached hand-out). Yuri walked us through the FOTG format, pointing out the different sections of information such as: Soils Information; Soils Legend; Acreage and Proportionate Extent of the Soils; Soil Data Download; Soils Maps; and Hydric Soil List by county. She noted that Melissa Hanner, Resource Soil Scientist, has recently joined our Soil Science staff.



Soil Science Update

FOTG>Section II > Soils

FIELD OFFICE TECHNICAL GUIDE

 Support
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 Login

Welcome to NRCS Field Office Technical Guide (FOTG)
 Select a state for documents.

State: Pennsylvania SUBMIT

Document Tree
Document Search
Recently Changed

Keyboard navigation instructions

- Section I
- Section II
 - Climatic Data
 - Cultural Resources Information
 - Soils Information
 - Special Environmental Concerns
- Section III
- Section IV

Soils Information

Documents (2)

Document Title	Type	Pub Date	Subject	Keywords	Abstract	Size (kB)	Actions
Changes to PA Soil Data		2018-10-27	-	soils, soil survey	Information about changes to Pennsylvania soils data as a result of the national annual data refresh.	88	
New Soils Interpretations		2018-10-27	-	soils, soil survey, soil interpretations	Information about new national soils interpretations	502	



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Natural Resources Conservation Service

Soil Science Update

FOTG > Section II > Soils > Soils Legend



FIELD OFFICE TECHNICAL GUIDE



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Select a state for documents.

State:

Pennsylvania

SUBMIT

Keyboard navigation instructions

Section I

Section II

Climatic Data

Cultural Resources Information

Soils Information

Highly Erodible Soil Lists

Hydric Soil List

LESA

Soil Data Download

Soils Legend

Soils Legend

Documents (1 - 25)

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Document Title	Type	Pub Date	Subject	Keywords	Abstract	Size (kB)	Actions
Adams County		2019-1-15	Soils Information	soils	Soil map unit symbols, map unit names, and acreage by county.	17	
Allegheny County		2019-1-15	Soils Information	soils	Soil map unit symbols, map unit names, and acreage by county.	13	



Soil Science Update

Acreage and Proportionate Extent of the Soils

Adams County, Pennsylvania

Map symbol	Map unit name	Acres	Percent
AbA	Abbottstown silt loam, 0 to 3 percent slopes	15,166	4.5
AbB	Abbottstown silt loam, 3 to 8 percent slopes	7,493	2.2
ArB	Arendtsville gravelly loam, 3 to 8 percent slopes	3,502	1.0
ArC	Arendtsville gravelly loam, 8 to 15 percent slopes	4,469	1.3
ArD	Arendtsville gravelly loam, 15 to 25 percent slopes	1,769	0.5
ArE	Arendtsville gravelly loam, 25 to 40 percent slopes	400	0.1
AtA	Athol gravelly silt loam, 0 to 3 percent slopes	341	0.1
AtB	Athol gravelly silt loam, 3 to 8 percent slopes	786	0.2
AtC	Athol gravelly silt loam, 8 to 15 percent slopes	155	*
Ba	Baile silt loam	646	0.2
Be	Bermudian silt loam	256	*
BgA	Birdsboro silt loam, 0 to 3 percent slopes	292	*
BgB	Birdsboro silt loam, 3 to 8 percent slopes	1,974	0.6
BgC	Birdsboro silt loam, 8 to 15 percent slopes	226	*
Bo	Bowmansville silt loam	11,379	3.4
BrB	Brecknock channery silt loam, 3 to 8 percent slopes	3,564	1.1
BrC	Brecknock channery silt loam, 8 to 15 percent slopes	1,769	0.5
BrD	Brecknock channery silt loam, 15 to 25 percent slopes	586	0.2
BuB	Buchanan channery loam, 3 to 8 percent slopes	1,482	0.4



Soil Science Update

Document Tree | Document Search | Recently Changed

● Keyboard navigation instructions

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 - Highly Erodible Soil Lists
 - Hydric Soil List
 - LESA
 - Soil Data Download**
 - Soils Legend

Soil Data Download

Documents (1 - 25) Previous **1** 2 3 Next

Document Title	Type	Pub Date	Subject	Keywords	Abstract	Size (kB)	Actions
Adams County		2018-10-17	Soils Information	Web Soil Survey, Adams County Area of Interest, AOI	Link to websoilsurvey Area of Interest (AOI) for this county. Click on the Soil Map tab for soils data.	--	
Allegheny County		2018-10-27	--	soils data, Allegheny County	Link to websoilsurvey Area of Interest (AOI) for this county. Click on the Soil Map tab for soils data.	--	



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Soil Science Update

USDA United States Department of Agriculture
Natural Resources Conservation Service

Web Soil Survey

Contact Us | Subscribe | Archived Soil Surveys | Soil Survey Status | Glossary | Preferences | Link | Logout | Help

Area of Interest (AOI) | Soil Map | Soil Data Explorer | Download Soils Data | Shopping Cart (Free)

Search

Area of Interest
Open All | Close All

AOI Properties
Clear AOI

AOI Information

Name:

Map Unit Symbols
 Use Soil Survey Area Map Unit Symbols
 Use National Map Unit Symbols

Area (acres): 333,950

Soil Data Available from Web Soil Survey

Adams County, Pennsylvania (PA001)

Data Availability	Tabular and Spatial, complete
Tabular Data	Version 12, Sep 18, 2018
Spatial Data	Version 3, Dec 14, 2013

Clear AOI

Import AOI
Export AOI

Quick Navigation

Address
State and County
Soil Survey Area

Area of Interest Interactive Map

Legend

View Extent: Contiguous U.S. | Scale: (not to scale)

0 9 mi



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Soil Science Update

Select a state for documents.

State:

Pennsylvania

SUBMIT

Document Tree

Document Search

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Keyboard navigation instructions

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Cultural Resources Information

Soils Information

Highly Erodible Soil Lists

Hydric Soil List

LESA

Soil Data Download

Soils Legend

Special Environmental Concerns

Section III

Section IV

Section V

Hydric Soil List

Documents (1)

Document Title	Type	Pub Date	Subject	Keywords	Abstract	Size (kB)	Actions
State Hydric Soil List		2019-1-16	Soils Information	soils	Official Hydric Soils Report generated through Soil Data Access Live.	-	





Soil Science Update

State Soil Data Access (SDA) Hydric Soils List

An SDA-populated select list is used to pick a state and SSA which enables creation of a "Hydric Soils Report" based upon those selections. The data is not static; it hits Soil Data Access Live. To reset the table hit F5 on the keyboard. Once a survey is selected and table appears, if a new survey is selected it will append to the table at the bottom. [For more information about the table.](#)

(select a state)



(no state selected)

Report Metadata: [Back to top](#)

- **Area_Symbol:** A symbol that uniquely identifies a single occurrence of a particular type of area (e.g. Dane Co., Wisconsin is WI025).
- **Area_Name:** The name given to the specified geographic area.
- **mukey:** A non-connotative string of characters used to uniquely identify a record in the Mapunit table.
- **Mapunit_SYM:** The symbol used to uniquely identify the soil mapunit in the soil survey.
- **Mapunit_Name:** Correlated name of the mapunit (recommended name or field name for surveys in progress).
- **Comp_Name_phase:** Component name - Name assigned to a component based on its range of properties. Local Phase - Phase criterion to be used at a local level, in conjunction with "component name" to help identify a soil component.
- **muacres:** The number of acres of a particular mapunit.
- **Comp_RV_Pet:** The percentage of the component of the mapunit.
- **majcompflag:** Indicates whether or not a component is a major component in the mapunit.
- **Comp_Acres:** The number of acres of a particular component in a mapunit. $((\text{muacres}^{\text{comp}} \text{pet}_r) / 100)$
- **Comp_Landform:** A word or group of words used to name a feature on the earth's surface, expressed in the plural form. Column Physical
- **Hydric_Rating:** A yes/no field that indicates whether or not a map unit component is classified as a "hydric soil". If rated as hydric, the specific criteria met are listed in the Component Hydric Criteria table.
- **Hydric_criteria:** Criterion code for the soil characteristic(s) and/or feature(s) that cause the map unit component to be classified as a "hydric soil." These codes are the paragraph numbers in the hydric soil criteria publication.



Soil Science Update

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convert 690 feet to meters... Google Maps Google NASIS URL Reports links NSSH Official Soil Series Descrip...

State Soil Data Access (SDA) Hydric Soils List

An SDA-populated select list is used to pick a state and SSA which enables creation of a "Hydric Soils Report" based upon those selections. The data is not static; it hits Soil Data Access Live. To reset the table hit F5 on the keyboard. Once a survey is selected and table appears, if a new survey is selected it will append to the table at the bottom. [For more information about the table.](#)

Pennsylvania

selected stateId = PA

State_Sym	Area_Symbol	Area_Name	mukey	Mapunit_SYM	Mapunit_Name	Comp_Name_phase	muacres	Comp_RV_Pct	majcompflag	Comp_Acres	Comp_Landform	micro
PA	PA001	Adams County, Pennsylvania	545545	AbA	Abbotstown silt loam, 0 to 3 percent slopes	Croton	15166	5	No	758	depressions	null
PA	PA001	Adams County, Pennsylvania	545546	AbB	Abbotstown silt loam, 3 to 8 percent slopes	Croton	7493	5	No	374	depressions	null
PA	PA001	Adams County, Pennsylvania	545554	Ba	Baile silt loam	Baile	646	85	Yes	549	depressions	null
PA	PA001	Adams County, Pennsylvania	545556	BgA	Birdsboro silt loam, 0 to 3 percent slopes	Lamington	292	3	No	8	terraces	null
PA	PA001	Adams County, Pennsylvania	545557	BgB	Birdsboro silt loam, 3 to 8 percent slopes	Lamington	1974	3	No	59	terraces	null
PA	PA001	Adams County, Pennsylvania	545559	Bo	Bowmansville silt loam	Bowmansville	11379	90	Yes	10241	flood plains	null
PA	PA001	Adams County, Pennsylvania	545563	BuB	Buchanan channery loam, 3 to 8 percent slopes	Andover	1482	10	No	148	depressions	null
PA	PA001	Adams County, Pennsylvania	545564	BvB	Buchanan channery loam, 0 to 8 percent slopes, extremely stony	Baile	673	3	No	20	depressions	null
PA	PA001	Adams County, Pennsylvania	545568	ClkA	Clarksburg silt loam, 0 to 3 percent slopes	Thorndale	3024	5	No	151	depressions	null

110%



Soil Science Update

Any Soils Questions

Contact NRCS State Soils Staff

Yuri Plowden, State Soil Scientist

yuri.plowden@pa.usda.gov

Melissa Hanner, Resource Soil Scientist

melissa.hanner@pa.usda.gov

Pete Vanderstappen (NRCS), State Engineer was introduced and provided a **Conservation Engineering Update (See attached Hand-out)**. Pete discussed the details of: **TGN 269 (Technical Guidance Notice), Cultural Resources Guidance Update; and TGN 267, Concentrated Livestock Area Guidance Update**. He announced the upcoming **CNMP (Comprehensive Nutrient Management Program) Workshop** that will be held on **March 21, 2019, 9am till 3 pm** at the **Giant Grocery Store Complex, 2300 Linglestown Road, Harrisburg, PA 17110**, and went over the **Agenda** topics.



Conservation Engineering Update

TGN 269 Cultural Resources Guidance Update

- **Classification of Conservation Practice Effects on Cultural Resources:** Ratings of Effect or Ground Disturbing, Potentially Effects/Potentially Ground Disturbing and No Effect/Not Ground Disturbing were updated as per Pennsylvania's Programmatic Prototype Agreement with the Pennsylvania State Historic Preservation Office (PA-SHPO). Practices automatically requiring PA-SHPO consultation are identified.
- **Cultural Resource Review Worksheet:** This form was revised to provide clarification of needed information to complete cultural resources review.
- **Conservation Stewardship Program (CSP) Enhancement Effects on Cultural Resources:** This is withdrawn as all CSP enhancements are associated with Conservation Practices. Please use the Classification of Conservation Practice Effect on Cultural Resources.
- **National Register of Historic Places Access:** This link is withdrawn as anyone completing a cultural resource review in Pennsylvania is required to use either the Priority Resource Map or the PA Cultural Resources Geographic Information System (PA CRG/5) website <https://www.dot7.state.pa.us/crgis/>

A photograph showing a person in a brown jacket and blue pants kneeling on a rocky bank next to a large, light-colored pipe. The background is a grassy area with some trees.

Conservation Engineering Update

TGN 267 Concentrated Livestock Area Guidance Update

Concentrated Livestock Area Guidance Exhibit 5 REVISION, Size Requirements for Heavy Use Areas by Animal Type and Weight has been updated to reflect a revised Exhibit 5. Only the exhibit changed.

In addition to being revised in the Concentrated Livestock Area Guidance, the exhibit is now also posted as a separate document for easier access.

Supplement 5, Standard Animal Weights Pennsylvania Act 38 Nutrient Management Program/ Technical Manual has also been added to the folder as a reference.

A photograph showing a person in a brown jacket and blue jeans crouching on a rocky bank next to a concrete pipe that runs into a stream. The background is a grassy area.

Conservation Engineering Update

CNMP Workshop Announcement

2300 Linglestown Rd., Harrisburg, PA 17110

March 21, 2019 Agenda Topics

- TSP Program Administration
- Conservation Planning Guidance
- Technical Guidance for Practice Implementation
- Financial Assistance for Putting CNMPs Into Action
 - Planning Services, Implementation Services



United States Department of Agriculture

Questions?



NRCS Pennsylvania Technical Guide



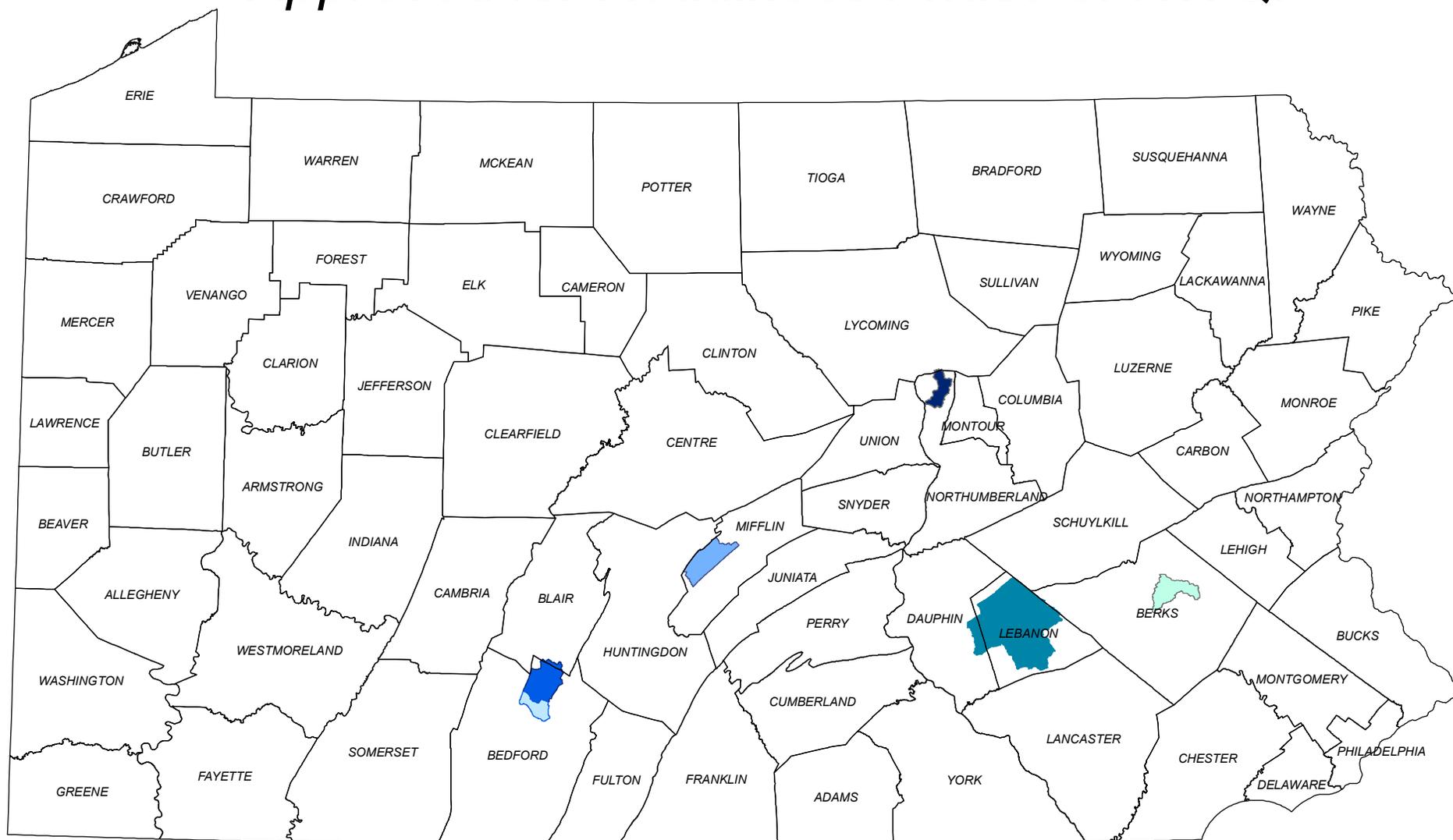
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Denise Coleman (NRCS), announced that the NRCS Annual Report has been published for 2018 and posted to our website, then went over some of the high points and accomplishments for the year.

Ed Sanders (NRCS), Program Analyst presented an update on EQIP. He provided a map of Pennsylvania showing watersheds that have been approved for the Readiness Phase of the National Watershed Quality Initiative (NWQI), (See attached hand-out). He reviewed the different existing watershed initiatives. He indicated that an analysis was in progress to examine water quality in these areas and come up with a summary of recommendations based on the NRCS CPA 52. This information will be pulled into an outreach plan not only to identify problems, but to determine what we can do to resolve them. Also a monitoring system would be established to track those resolutions. He noted that a Partners Meeting was held on the 17th of January to discuss details of the Training which will be happening on 26 thru 28 February of this year. Details are forthcoming. Ed went on to summarize the funding effects and allocations in detail resulting from the new Farm Bill.

Approved for Readiness Phase of NWQI



- | | | | |
|---|--------------|---|--------------|
|  | Swatara |  | Maiden Creek |
|  | Beaver Creek |  | Upper Kish |
|  | Warrior Run |  | Yellow Creek |

Noel Soto (NRCS), Soil Conservationist, provided an update on CSP and CIG. Most importantly, Noel noted that the programs have survived and funding has been approved in the new Farm Bill. He said that we will be getting further program details, policy will be established, when received, we will train-up everyone as quickly as possible and then move on. Noel asked for ideas for CIG projects. Money will be provided for CIG again this year to accommodate those projects. If all goes well, we would be about the same as in previous years. The announcement would go out in April and from there, selection and then contracting.

PROGRAM IMPLEMENTATION PROCESS

1. Pass of the Agriculture Improvement Act of 2018 (AKA **Farm Bill**)
Very Broad language. Example:
Higher payment rates for cover crops
2. Agencies work on the preparing the **Program Regulation** (period for public comments on the Federal Register)
More specific language. Example:
Cover crops payment of up to \$100/acre
3. Agencies work on **Program Policy**
Very specific language based on the Regulation. Example:
Payment for single specie cover crop will be \$40/Acre
Payment for two species cover crop will be \$60/Acre
Payment for multiple species including legumes & radishes is \$100/Acre
4. Staff offers the program to producers



2018 FARM BILL – CSP

- CSP moved under the same Chapter as EQIP
- Existing contracts will continue under previous authority
- No renewals authorized under previous authority
- No longer an Acre based program
- States will receive funding allocation
- The \$18/acre national average removed
- General & renewal applications will be ranked & compete for funds



2018 FARM BILL - CSP

- Higher payment rates for cover crops
- Supplemental payment options to include Advanced Grazing Management
- Allows for a 1-time payment to producers agree in developing a comprehensive conservation plan
- States will receive allocation to support organic and transition to organic production
- Focus on soil health
- Streamlining & coordination with EQIP



2018 FARM BILL - CSP

- Authorized funding levels:
FY2019 = \$700,000,000
FY2020 = \$725,000,000
FY2021 = \$750,000,000
FY2022 = \$800,000,000
FY2023 = \$1,000,000,000



2018 FARM BILL - CSP

- Establishes the CSP-Grasslands Conservation Initiative
- Eligible land includes cropland for which “based acres” have been maintained
- 5-year contracts
- No renewals
- \$18/acre payments



Jim Gillis (NRCS), State Biologist, gave a presentation on Food Security Act Compliance (See attached hand-out). Jim gave a brief background on the Food Security Act, which was established in 1985, as well as the purpose and requirements of that Act. He indicated that "Controlling erosion" was what he was going to focus on in his presentation. Looking back in the past year, there has been significant amounts of rainfall. Warren County is the only county in Pennsylvania to have the distinction of having "Normal" amounts of rainfall this past year! He described the three types of erosion that we must work with are: "Predictable" erosion, new erosion and failure of existing practices. Keeping in mind that all participants of NRCS assistance, must control sheet and rill erosion and ephemeral gully erosion. There are The Food Security Act (FSAct) variances available through NRCS. In order to be eligible for any of those variances, the producer must be working with and receiving assistance from NRCS. The available variances are Temporary, must be checked by NRCS, and unrelated to non-USDA concerns or violations such as Clean Water Act, clean Streams law, etc. FSAct variances available through NRCS were explained in detail. They are: "HEL Compliance Deficiencies found while providing Technical Assistance" (also known as the 45-day, One Year Rule); "Variance for special problems, including Weather, Pests, or Disease"; "Variance for a failure of a technical and minor nature." Food Security Act Compliance is summarized as follows: USDA participants must control sheet and rill erosion, wind erosion, and ephemeral gully erosion to maintain USDA eligibility; High rainfall amounts in 2018 caused erosion, and potentially more farmers out of compliance with FSAct; NRCS variances available that allow farmers a one-year "grace period" to get back into FSAct compliance without loss of USDA eligibility by working with NRCS and working to resolve erosion issues, to meet NRCS standards, within one year. It should be noted, that if the issues cannot be completed within one year, it is possible that FSA can grant another year if necessary. Jim and Denise fielded questions from those present and on the phone concerning compliance measures.



Food Security Act compliance

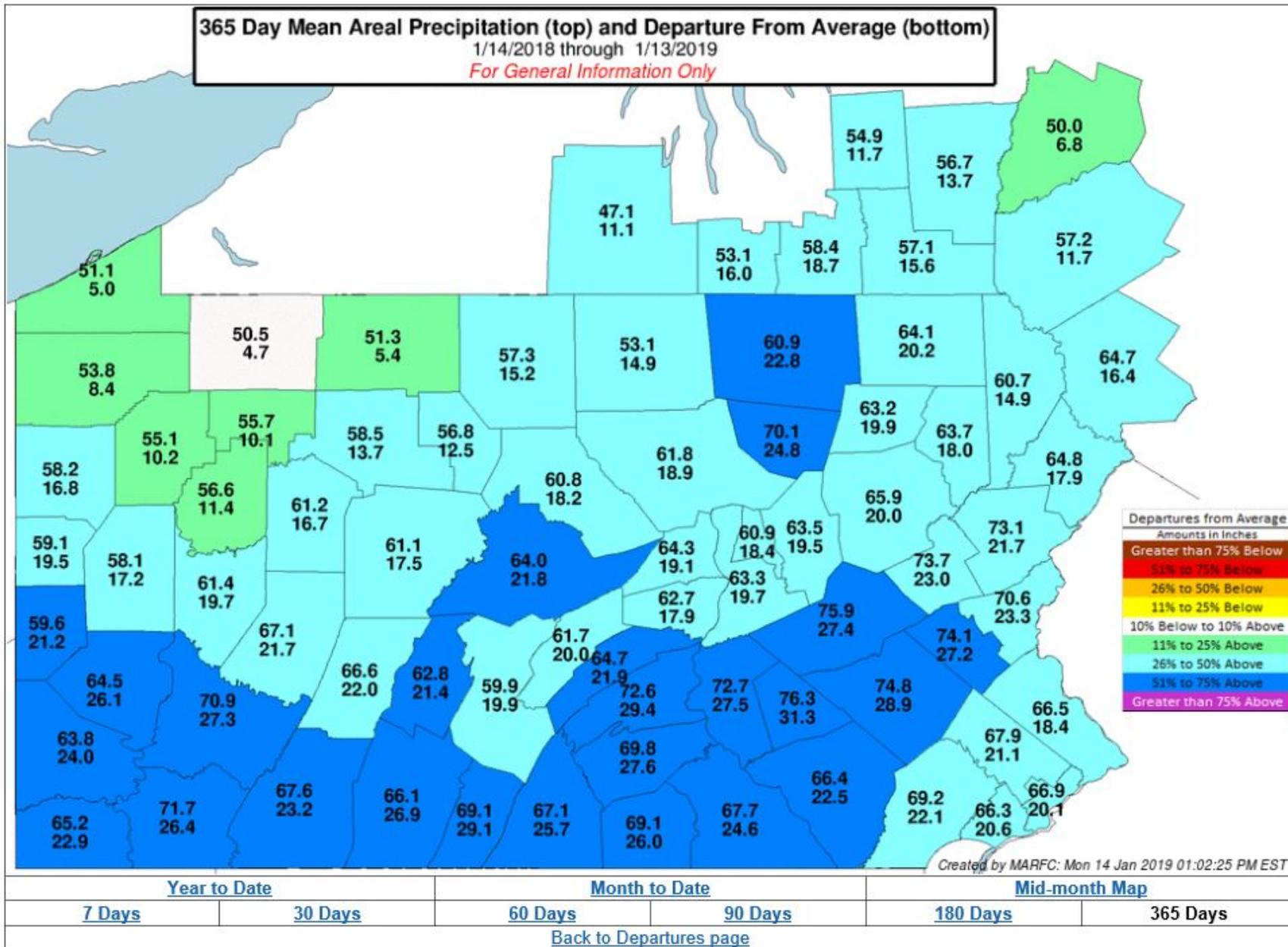
Jim Gillis, State Biologist, PA-NRCS

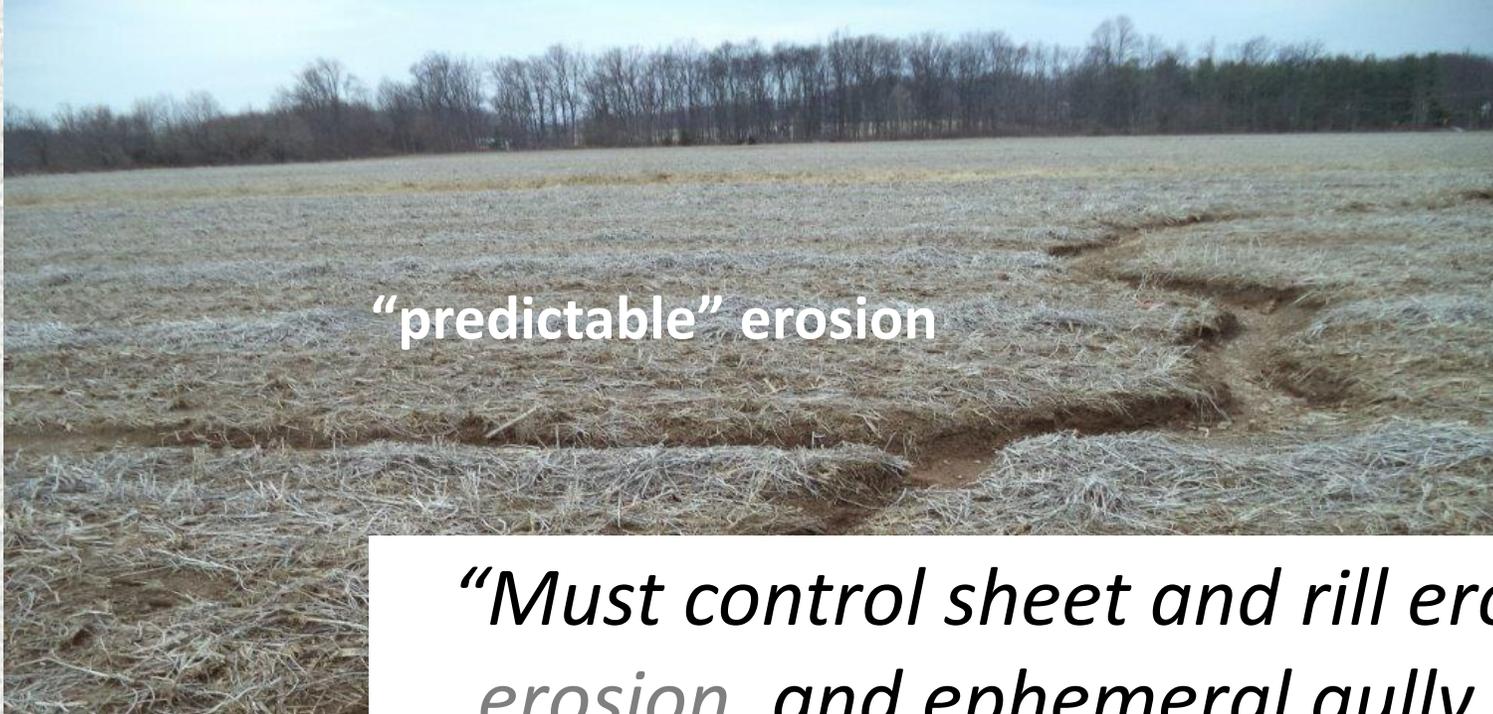


Food Security Act compliance

- The Food Security Act of 1985 (FSAct) established two main rules that everyone who wants USDA assistance must follow:
 1. Do not grow crops on Highly Erodible Land (HEL) without an acceptable conservation plan:
 - a. Plan must be implemented and meet 2T (fields that were in crops before 1985) or T (fields that were first cropped after 1985).
 - b. Must control sheet and rill erosion, wind erosion, and ephemeral gully erosion.
 2. Do not convert wetlands to make the production of ag commodities possible.

2018 Rainfall





“predictable” erosion



new erosion

“Must control sheet and rill erosion, wind erosion, and ephemeral gully erosion...”



failure of existing practices



All FSA Act Variances available through NRCS:

- require **cooperation with / assistance from** NRCS,
- are **temporary**,
 - provide a one-year “grace period” to address erosion concerns and meet NRCS standards
- **must be checked by NRCS** at the end of the one-year variance,
 - If erosion has been fixed, USDA eligibility continues with no interruptions
 - If erosion remains, NRCS documents non-compliance and forwards to FSA. FSA begins their review process to decide whether USDA eligibility is possible
- and **are unrelated to non-USDA concerns or violations.**
 - such as Clean Water Act, Clean Streams law, etc.

FSAct Variances available through NRCS

- National Food Security Act Manual 520.11,
- “HEL Compliance Deficiencies found while providing Technical Assistance”
 - “The 45-Day, One-Year Rule”
 - NRCS finds a potential HEL violation *while providing technical assistance*.
 - NRCS develops a conservation plan with farmer **within 45 days**, which contains all practices needed to resolve erosion concern when implemented.
 - Farmer installs all necessary practices in the conservation plan within **one year** of the plan’s signature date
 - with or without financial assistance from USDA (i.e., EQIP \$\$\$).

FSA Act Variances available through NRCS

- National Food Security Act Manual 520.15,
- “Variance for Special Problems, including Weather, Pests, or Disease”
 - *Farmer requests* a one-year variance due to weather.
 - NRCS determines if a weather variance is warranted on a local basis. *Can only be applied to large-scale areas if those areas have been declared a disaster area by FSA, the PA Governor, USDA, or the President.*
 - Farmer implements all necessary practices to fully resolve the erosion concern within one year of the variance start date.

FSAct Variances available through NRCS

- National Food Security Act Manual 520.16,
- “Variance for a Failure of a Technical and Minor Nature”
 - Applies to “Failure to maintain *one or more previously applied practices*” (existing practices failed).
 - NRCS determines actions necessary to resolve failure, and updates conservation plan.
 - Farmer implements all necessary practices to fully resolve the erosion concern within one year of the variance start date.

Food Security Act compliance -- Summary

1. USDA participants must control sheet and rill erosion, wind erosion, and ephemeral gully erosion to maintain USDA eligibility.
2. High rainfall amounts in 2018 caused erosion, and potentially more farmers out of compliance with FSAct.
3. NRCS variances available that allow farmers a one-year “grace period” to get back into FSAct compliance without loss of USDA eligibility:
 - Must work with NRCS
 - Must resolve erosion issues, to meet NRCS standards, within one year.

Hathaway Jones (NRCS) was introduced and provided an update on Easement Programs, (WRE), as well as a presentation on what WRE is all about. (See attached handout.) She started off by identifying her fellow NRCS Staff members. Agricultural Conservation Easement Program (ACEP) consists of two components: Wetland Reserve Easement (WRE) and Agricultural Land Easement (ALE). She described the general application/enrollment steps, which are to: determine landowner eligibility; determine legal land eligibility; and determine physical land eligibility. She went on to fully explain each of these steps and their requirements. In addition, she discussed new worksheets that will be used to assist in determining the ACEP-WRE Ranking Scoring. One worksheet will be a generalized worksheet to cover most areas and one specific for Bog Turtle/Massasauga ranking. As noted, these worksheets are in draft form as yet and will be finalized in the very near future. A question was asked if Hathaway needed input on the ACEP-WRE ranking Worksheets. Hathaway indicated that she would appreciate any input to assist in making the worksheets as complete as possible, and to send any input to her as soon as possible. A motion was made and properly seconded to set a deadline of March 1st, 2019 to submit input. At that time, the ranking forms would be finalized.

Wetland Reserve Easement Program (WRE)



Helping People Help the Land

*USDA is an equal opportunity provider,
employer, and lender.*

State Office Easement Programs Staff

Susan Marquart, ASTC for Partnerships
Hathaway Jones, Easement Programs Manager
Mick Albert, Easements Program Analyst



ACEP

Agricultural **C**onservation **E**asement **P**rogram

Two Components:

Wetland

Reserve

Easement

Agricultural

Land

Easement



General Application/Enrollment Steps:

- 1) Determine Landowner Eligibility
- 2) Determine Legal Land Eligibility
- 3) Determine Physical Land Eligibility
 - *Screen Project – Interdisciplinary Team*



3. Land Eligibility - Physical



Key topics from the land eligibility- physical presentation

1. Restoration
2. Current agricultural use
3. Degradation and manipulation of hydrology
4. Restoration
5. Habitat improvement
6. Hydric soils
7. Documentation
8. Restoration

Degrading/manipulating practices we are seeking for potential enrollment:

- Tile line
- Farm ditches
- Water laying in a crop field
- Wet pastures

Preferred field conditions:

- Gentle sloping fields
- All must include hydric soils

In the field indicators of possible
program eligibility











What Land is Eligible?

Eligible Lands

Manipulated hydric areas which are restorable:

- FSAAct label (PC, FW, FWP, W)
- Riparian linkages
- Eligible CRP/CREP
- Degraded Wetlands

Adjacent Lands Can be up to 1:1 match of

adjacent acres that **contribute** to the easement area.

Eligible Acres

- Eligible acres are those areas capable of having hydrology and wetland vegetation *restored* to historic conditions
- Key features to eligible acres
Hydric soils, degradation/manipulation,
gentle sloping fields
- Purpose of WRE is to restore wetland features by undoing some type of hydrologic manipulating activity

Adjacent acres

- Up to a 1:1 match (maximum)
- Adjacent acres must contribute to eligible acreage by....
 - Protecting hydrology
 - Protecting important habitat
 - Configuring a manageable boundary
 - Preventing future encroachments
- Adjacent acres must be connected to eligible acres and not a separate parcel

Wetland restoration conservation practices utilized to restore wetland conditions

- Construct embankment
- Break tile line
- Excavate shallow potholes
- Construct ditch plug

Any conservation practice that restores hydrology

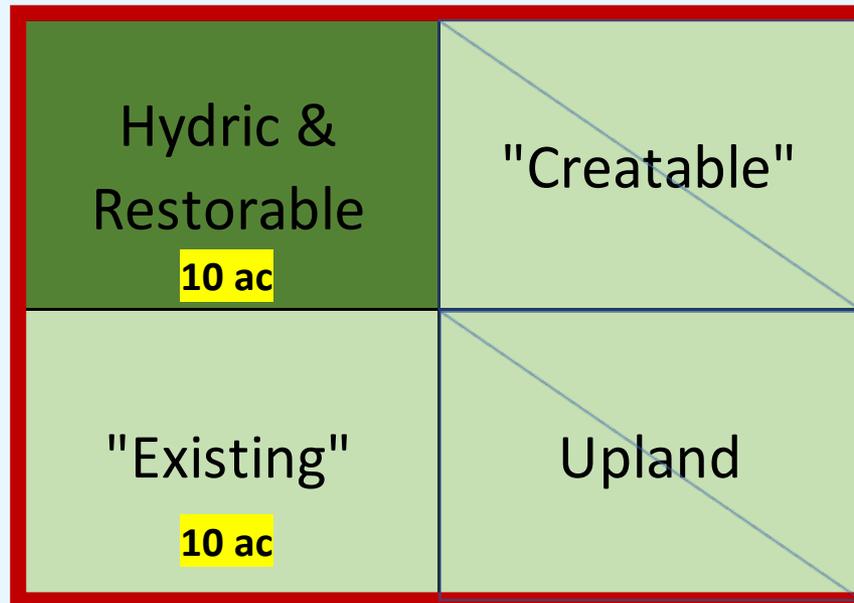
Which Land is Eligible or Adjacent?

Hydric & Restorable 10 ac	"Creatable"
"Existing"	Upland

We can only add up to 10 acres of “non-restorable” in this scenario. Which acres can we add?



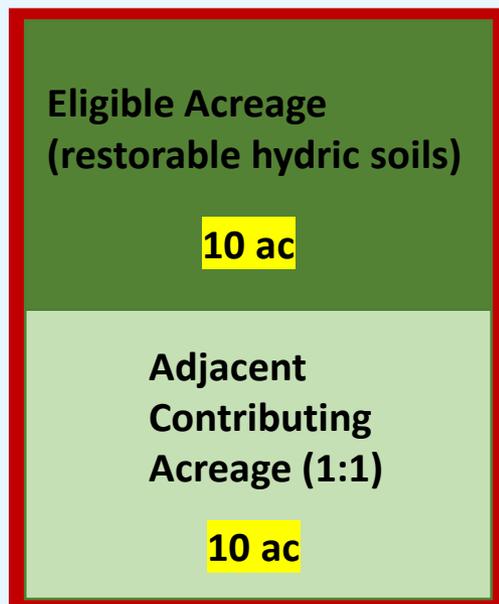
Which Land is Eligible or Adjacent?



Only the 10 acres south of the hydric and restorable acreage contribute significantly to the hydric restorable (eligible) area. These acres are the only acres we can enroll as "adjacent" acreage.



Which Land is Eligible or Adjacent?

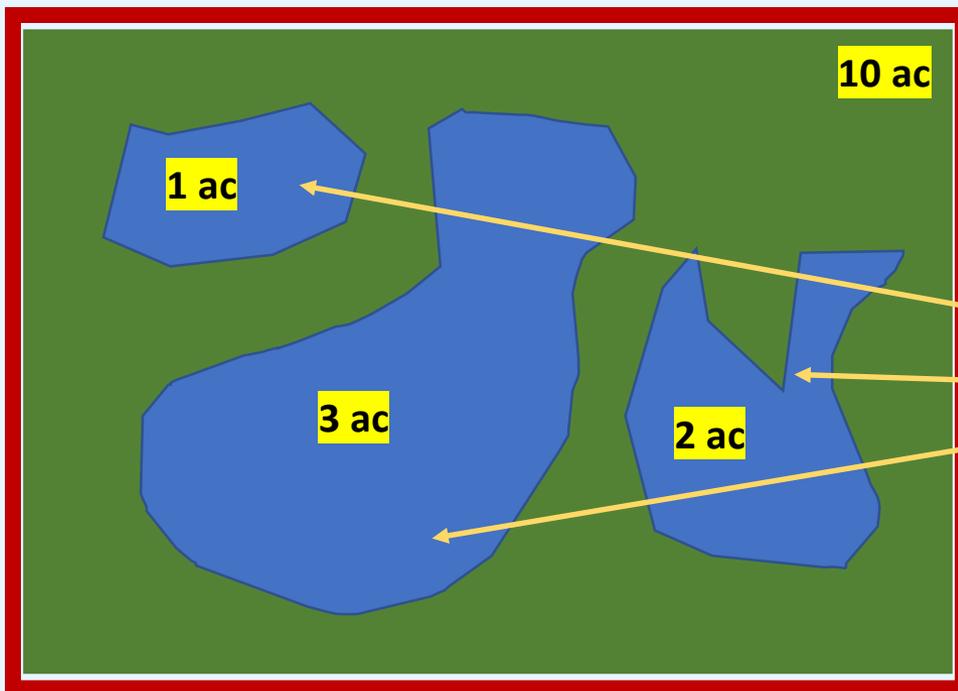


Final Easement Boundary



Which Land is Eligible or Adjacent?

Eligible Acreage (restorable hydric soils)

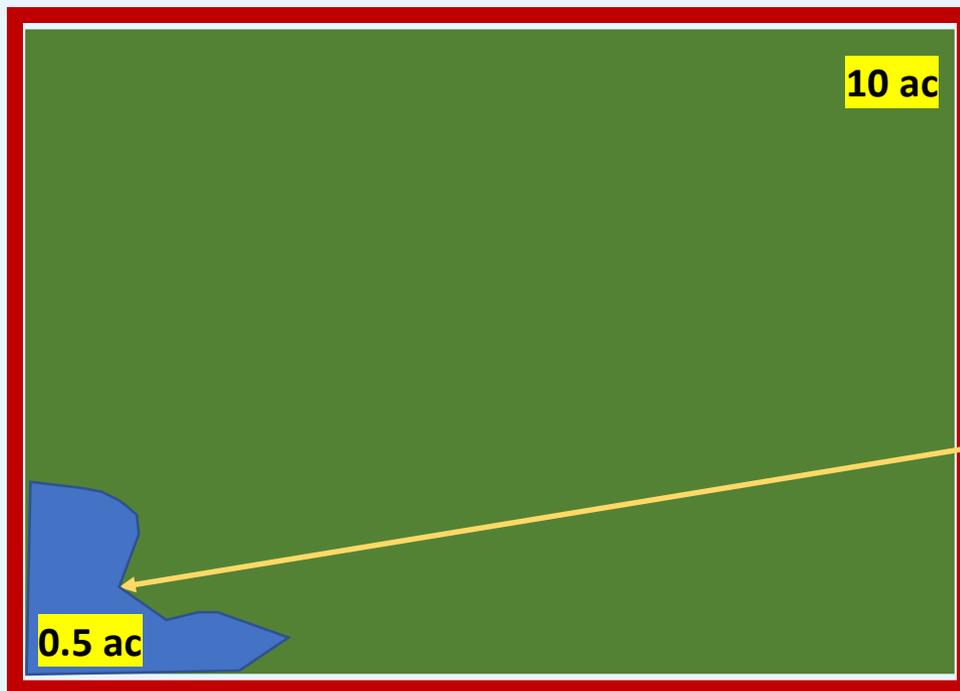


At least 50% of the eligible acreage (restorable hydric soils) MUST HAVE a restoration footprint.



Which Land is Eligible or Adjacent?

Eligible Acreage (restorable hydric soils)



There is not enough restoration in this example to warrant enrolling a 20 acre easement.



Interdisciplinary Team

- Vetting process to ensure the land being offered for enrollment is restorable:
 1. Meets the programmatic requirements for eligibility
 2. Can support a successful restoration project

Hydric?

Restorable? (permits, engineering, hydrology, habitat, etc.)



Interdisciplinary Team

The Interdisciplinary Team consists of:

1. Soil Scientist (Hydric? Hydrology?)
2. Engineer (Hydrology? Restorable?)
3. Biologist (Restorable? Habitat?)

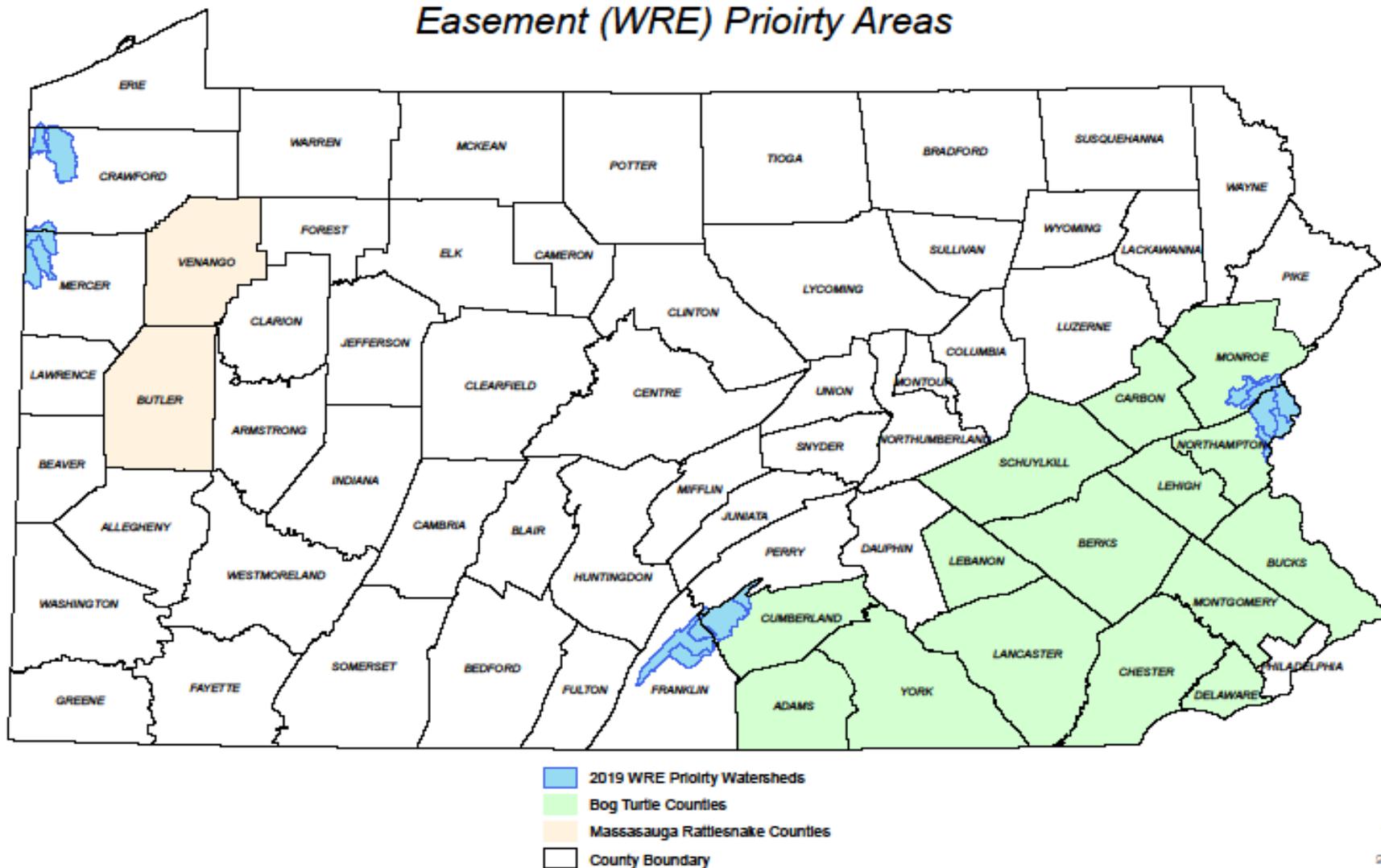


During the eligibility vetting and investigation process, we are searching for red flags that indicate we should not enroll the land into WRE

*Sites that do not meet programmatic or legal requirements can create issues for restoration, management, monitoring, and maintenance in **perpetuity**....*



FY2019 Wetland Restoration Easement (WRE) Priority Areas



Alexis Tirado, FSA Program Specialist, was unable to attend the meeting, but provided Pennsylvania CREP Enrollment/Re-enrollment Updates which were forwarded to all members by email after the meeting. Attached is a copy of those updates.

PENNSYLVANIA CREP ENROLLMENT/RE-ENROLLMENT UPDATES

OHIO RIVER BASIN CREP

As of September 30th,2018, 1,163 active contracts are in place for a total of 21,473 acres under contract.

In the 2017-18 program year:

- 16 new contracts were approved on 230.88 acres.
- 21 re-enrolled contracts were approved on 343.85 acres.

CHESAPEAKE BAY CREP

As of September 30th,2018, 6,936 active contracts are in place for a total of 116,592 acres under contract.

In the 2017-18 program year:

- 224 new contracts were approved on 3,223.80 acres.
- 351 re-enrolled contracts were approved on 7,507.35 acres.

DELAWARE RIVER BASIN CREP

As of September 30th,2018, 3 active contracts are in place for a total of 62 acres under contract.

In the 2017-18 program year:

- 2 new contracts were approved on 61.11 acres.
- No re-enrolled contracts/acres were approved.

Summary of PA OHIO RIVER BASIN CREP Active Contracts by Practice Acres as of September 30th, 2018

Practice	Description	Acres
CP1	Introduced grasses and legume planting	8,241
CP2	Native grass planting	5,974
CP4D	Permanent wildlife habitat	511
CP8A	Grassed waterways	51
CP9	Shallow water areas for wildlife	2
CP10	Vegetative cover already established (grass)	3,591
CP12	Wildlife food plots	100
CP15A	Contour grass buffer strips	6
CP21	Filter strips	57
CP22	Riparian forest buffers	1,964
CP23	Wetland restoration	317
CP29	Marginal pastureland wildlife habitat buffer	422
CP30	Marginal pastureland wetland buffer	237
CP33	Habitat buffer for upland birds	0
TOTALS		21,473

Summary of PA CHESAPEAKE BAY CREP Active Contracts by Practice Acres as of September 30th, 2018

Practice	Description	Acres
CP1	Introduced grasses and legume planting	67,473
CP2	Native grass planting	20,842
CP3A	Hardwood tree planting	501
CP4D	Permanent wildlife habitat	3,856
CP8A	Grassed waterways	139
CP9	Shallow water areas for wildlife	30
CP10	Vegetative cover already established (grass)	1,659
CP12	Wildlife food plots	851
CP15A	Contour grass buffer strips	38
CP21	Filter strips	699
CP22	Riparian forest buffers	18,869
CP23	Wetland restoration	378
CP29	Marginal pastureland wildlife habitat buffer	785
CP30	Marginal pastureland wetland buffer	232
CP33	Habitat buffer for upland birds	240
TOTALS		116,592

Practice	Description	Acres
CP1	Introduced grasses and legume planting	24
CP2	Native grass planting	35
CP4D	Permanent wildlife habitat	0
CP8A	Grassed waterways	1
CP9	Shallow water areas for wildlife	0
CP10	Vegetative cover already established (grass)	0
CP12	Wildlife food plots	0
CP15A	Contour grass buffer strips	0
CP21	Filter strips	0
CP22	Riparian forest buffers	0
CP23	Wetland restoration	0
CP23A	Wetland restoration, Non-Floodplain	0
CP29	Marginal pastureland wildlife habitat buffer	2
CP30	Marginal pastureland wetland buffer	0
CP33	Habitat buffer for upland birds	0
TOTALS		62

Susan Marquart, NRCS Assistant State Conservationist for Partnerships, was introduced and provided an update on the Regional Conservation Partnership Program (RCPP). (See attached report) She stated that the first 5 RCPP projects from the first funding round utilizing FY 2014 and 2015 funds are currently in the implementation phase. Those projects being: Stroud Project, Productive Farms and Clean Streams for Berks and Chester Counties; NFWF Project, Delaware River Watershed Working Lands Conservation and Protection Partnership; NFWF Project, Comprehensive Watershed Conservation in Dairy and Livestock Landscapes of the Chesapeake Bay Watershed; Alliance for the Chesapeake Bay Project, Mason-Dixon Working Lands Partnership; and The American Bird Conservancy Project, Cerulean Warbler Appalachian Forestland Enhancement. She noted that Pennsylvania received additional Environmental Quality Incentive Program (EQIP) funds for the Cerulean Warbler project and that we are currently taking applications for those additional funds, and that 49 applications have been received so far. The FY 2017 Chesapeake Bay Foundation project in Center, Clinton and Lycoming Counties is implementing CSP projects and taking EQIP Applications. To date, 6 EQIP applications have been received. The FY 2018 PA Department of Agriculture (PDA) project is also currently taking EQIP applications and to date have received 38 applications. She stated that we are also working with PDA on the Agricultural Land Easement Program (ALE) portion of their RCPP project and will be developing the ALE agreement with PDA to accept those applications. The new FY 2018 Chester County Conservation District Project is currently accepting EQIP applications and 22 applications have been received so far.

January 29, 2019

State Technical Committee Report

Regional Conservation Partnership Program

The first five RCPP projects from the first funding round utilizing FY 2014 and 2015 funds are currently in the implementation phase: These five projects include:

- Stroud Project: “Productive Farms and Clean Streams for Berks and Chester Counties”;
- NFWF Project: “Delaware River Watershed Working Lands Conservation and Protection Partnership”;
- NFWF Project: “Comprehensive Watershed Conservation in Dairy and Livestock Landscapes of the Chesapeake Bay Watershed”;
- Alliance for the Chesapeake Bay Project: “Mason-Dixon Working Lands Partnership”;
- and
- American Bird Conservancy Project: “Cerulean Warbler Appalachian Forestland Enhancement”.

As I mentioned at the last meeting, PA received additional EQIP funds for the Cerulean Warbler RCPP project and we are currently taking applications for those additional funds. To date this FY, we have received **49** EQIP applications for these additional funds.

The FY 2017 Chesapeake Bay Foundation project in Center, Clinton, and Lycoming Counties, “Soil Health: Improving Land, Water, and Producer Profitability” is implementing CSP projects and taking EQIP applications. To date this FY, we have received **6** EQIP applications.

The new FY 2018 PA Department of Agriculture (PDA) project “Implementing Conservation Practices and CNMPs on Pennsylvania Preserved Farms” is currently taking EQIP applications. To date this FY, we have received **38** EQIP applications.

We are also working with PDA on the Agricultural Land Easement Program (ALE) portion of their RCPP project and will be developing the ALE agreement with PDA to accept their ALE applications.

The new FY 2018 Chester County Conservation District project “CCCD Partnership for Chesapeake Bay Water Quality” is currently taking EQIP applications. To date this FY, we have received **22** EQIP applications.

Being no further business to conduct, the meeting adjourned by Denise Coleman at 3:05 PM.

State Technical Committee

January 29, 2019

Meeting Notes

Denise Coleman, Natural Resource Conservation Service (NRCS) opened the meeting promptly at 1pm. Due to the inclement weather conditions, persons in actual attendance would be limited, so copies of all presentations and hand-outs were sent to all members electronically so they could participate by using the Call-In Toll-free conference number. She did a roll call of those who had called in and of those physically present at the meeting. It should be noted that 16 members were on the conference call and 12 members in the room for a total of 28 participating. Denise commented on the 2018 Farm Bill being passed. She explained that there were no talking points presently available concerning the new Farm Bill, but that they are forthcoming. She went on to introduce Mr. Eric Chase from Penn State University researcher, Center for Dirt and Gravel Roads, who delivered a presentation on one of our current Conservation Innovation Grant (CIG) projects.

00:05:55 - Eric Chase (Penn State University), made a very informative presentation concerning "Retrofitting the Roadside Ditch Network to Treat Nitrogen from Agricultural Runoff using Woodchip Bioreactors in southwest Bradford County, PA." (See attached hand-out) Eric explained exactly what the purpose of a "Woodchip Bioreactor" was, how and where it is constructed, how it functioned and how it performed its' mission in conservation for our environment. He noted that this project was new to Pennsylvania. The expected outcomes of the project are: Quantification of total nitrogen reduction and cost per pound of nitrogen removed using in-ditch bioreactors; define parameters where use of in-ditch woodchip bioreactors can be successful; establish the knowledge needed to enhance NRCS Denitrifying Bioreactor Standard (605); Establish data to show road ditch infrastructure can be used as a watershed-wide nutrient removal system.

00:28:08 - Dan Dostie (NRCS), State Resource Conservationist, gave a presentation entitled "NRCS Technical Guide Report" (See attached hand-out). It was an overview of the major changes to the Technical Guide initiated since our October 2018 meeting. Dan provided a Conservation Planning/Ecological Sciences update, in which he announced: TGN 271 Planning Guidance Update; TGN 270 NRCS CPA 52 Environmental Evaluation Update; TGN 268 Implementation Requirements for Forest Stand Improvement (666) and Tree/Shrub Establishment (612). He went on to explain the contents of each of the Technical Guide Notices (TGN).

00:33:24 - Yuri Plowden (NRCS), State Soil Scientist was introduced by Dan and presented information on NRCS the Field Office Technical Guide (FOTG) (See attached hand-out). Yuri walked us through the FOTG format, pointing out the different sections of information such as: Soils Information; Soils Legend; Acreage and Proportionate Extent of the Soils; Soil Data Download; Soils Maps; and Hydric Soil List by county. She noted that Melissa Hanner, Resource Soil Scientist, has recently joined our Soil Science staff.

00:37:24 - Pete Vanderstappen (NRCS), State Engineer was introduced and provided a Conservation Engineering Update (See attached Hand-out). Pete discussed the details of: TGN 269 (Technical Guidance Notice), Cultural Resources Guidance Update; and TGN 267, Concentrated Livestock Area Guidance Update. He announced the upcoming CNMP (Comprehensive Nutrient Management Program) Workshop that will be held on March 21, 2019, 9am till 3 pm at the Giant Grocery Store Complex, 2300 Linglestown Road, Harrisburg, PA 17110, and went over the Agenda topics.

Denise Coleman (NRCS), announced that the NRCS Annual Report has been published for 2018 and posted to our website, then went over some of the high points and accomplishments for the year.

00:45:37 - Ed Sanders (NRCS), Program Analyst presented an update on EQIP. He provided a map of Pennsylvania showing watersheds that have been approved for the Readiness Phase of the National Watershed Quality Initiative (NWQI), (See attached hand-out). He reviewed the different existing watershed initiatives. He indicated that an analysis was in progress to identify water quality and come up with a summary of recommendations based on the NRCS CPA 52. This information will be pulled into an outreach plan not only to identify problems, but to determine what we can do to resolve them. Also a monitoring system would be established to track those resolutions. He noted that a Partners Meeting was held on the 17th of January to discuss details of the Training which will be happening on 26 thru 28 February of this year. Details are forthcoming. Ed went on to summarize the funding effects and allocations in detail resulting from the new Farm Bill.

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to assist in determining the ACEP-WRE Ranking Scoring. One worksheet will be a generalized worksheet to cover most areas and one specific for Bog Turtle/Massasauga ranking. As noted, these worksheets are in draft form as yet and will be finalized in the very near future. A question was asked if Hathaway needed input on the ACEP-WRE ranking Worksheets. Hathaway indicated that she would appreciate any input to assist in making the worksheets as complete as possible, and to send any input to her as soon as possible. A motion was made and properly seconded to set a deadline of March 1st, 2019 to submit input. At that time, the forms would be finalized.

Alexis Tirado, FSA Program Specialist, was unable to attend the meeting, but provided Pennsylvania CREP Enrollment/Re-enrollment Updates which were forwarded to all members by email after the meeting. Attached is a copy of those updates.

01:50:31 - Susan Marquart, NRCS Assistant State Conservationist for Partnerships, was introduced and provided an update on the Regional Conservation Partnership Program (RCPP). (See attached report) She stated that the first 5 RCPP projects from the first funding round utilizing FY 2014 and 2015 funds are currently in the implementation phase. Those projects being: Stroud Project, Productive Farms and Clean Streams for Berks and Chester Counties; NFWF Project, Delaware River Watershed Working Lands Conservation and Protection Partnership; NFWF Project, Comprehensive Watershed Conservation in Dairy and Livestock Landscapes of the Chesapeake Bay Watershed; Alliance for the Chesapeake Bay Project, Mason-Dixon Working Lands Partnership; and The American Bird Conservancy Project, Cerulean Warbler Appalachian Forestland Enhancement. She noted that Pennsylvania received additional Environmental Quality Incentive Program (EQIP) funds for the Cerulean Warbler project and that we are currently taking applications for those additional funds, and that 49 applications have been received so far. The FY 2017 Chesapeake Bay Foundation project in Center, Clinton and Lycoming Counties is implementing CSP projects and taking EQIP

Applications. To date, 6 EQIP applications have been received. The FY 2018 PA Department of Agriculture (PDA) project is also currently taking EQIP applications and to date have received 38 applications. She stated that we are also working with PDA on the Agricultural Land Easement Program (ALE) portion of their RCPP project and will be developing the ALE agreement with PDA to accept those applications. The new FY 2018 Chester County Conservation District Project is currently accepting EQIP applications and 22 applications have been received so far.

Being no further business to conduct, the meeting adjourned by Denise Coleman at 3:05 PM.

State Technical Committee '29
Individuals on the Phone:

- 1) Frank Schneider - State Conservation Commission
- 2) Katie Ombalaki - NFWF
(ask Susan M)
- 3) Kelly O'Neill - Chesapeake Bay Foundation
- 4) Sonja Jaidoefer - US Fish & Wildlife Service (USFWS)
- 5) Katie Turner - The Nature Conservancy
- 6) Gary Gilmore - DNR Bureau of Forestry
- 7) Jennifer Faege - USFWS
- 8) Fred Saffian - EPA
- 9) Kent Adams - Peregrines Forever
- 10) Adam Tarr - Senator Casper's Office
- 11) Marel King - Chesapeake Bay Commission
- 12) Natalie Kraft - PDA
- 13) Dan Rosenberg - USDA-NRCS

- 14) Titus Martin - Capital R&D
- 15) Bill Angstadt - Consultant
- 16) MARK DUBIN - UNIV OF MD.

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TOTAL