



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION



Chesapeake Bay Program Office

# **What is Pennsylvania Doing? A Focus on Agriculture**

Chesapeake Bay Commission  
November 5, 2020

# Agenda

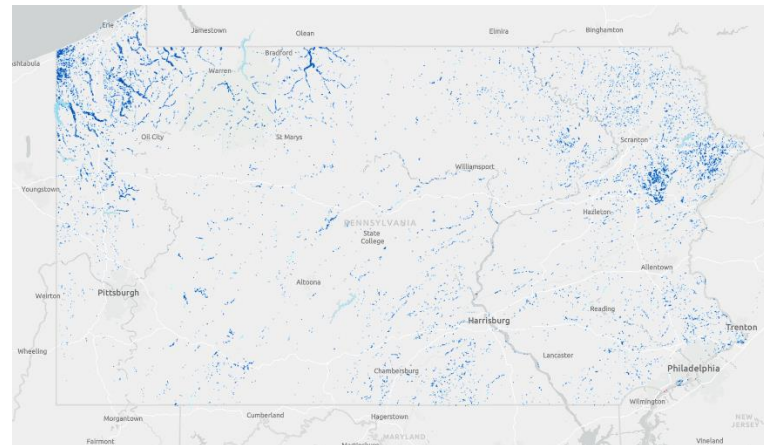
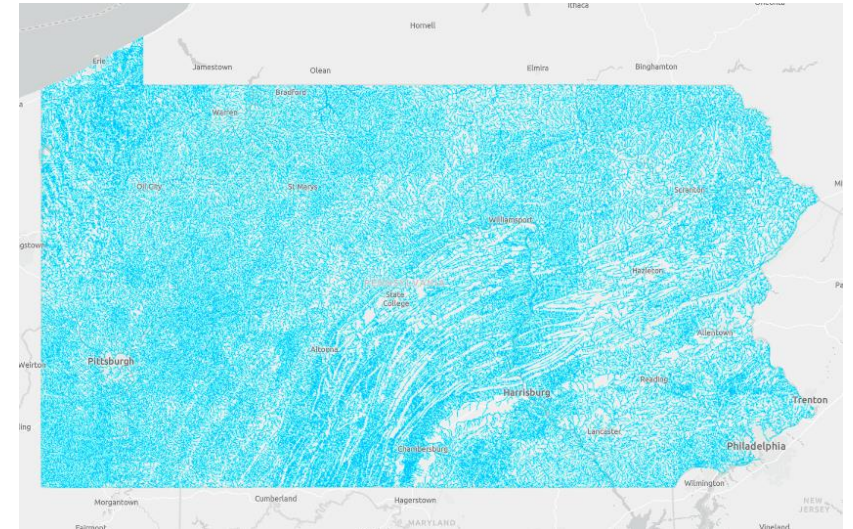
- Pennsylvania Clean Streams Law
- Local, State, and Federal Coordination
- Agricultural and Environmental Laws and Regulations
- Funding

# Pennsylvania Clean Streams Law

- Enacted in 1937
- *Waters of the Commonwealth* – shall be construed to include any and all rivers, streams, creeks, rivulets, impoundments, ditches, water courses, storm sewers, lakes, dammed water, ponds, springs and all other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial within or on the boundaries of this Commonwealth.
- Purpose
  - Regulates any discharge which may cause or contribute to pollution of waters of the Commonwealth of Pennsylvania.
  - Establishes the basic authority to protect streams from pollution - for the benefit of Pennsylvania's citizens and the environment.
- Pennsylvania Constitution
  - Article 1, Section 27 Environmental Rights Amendment – 1971
    - The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

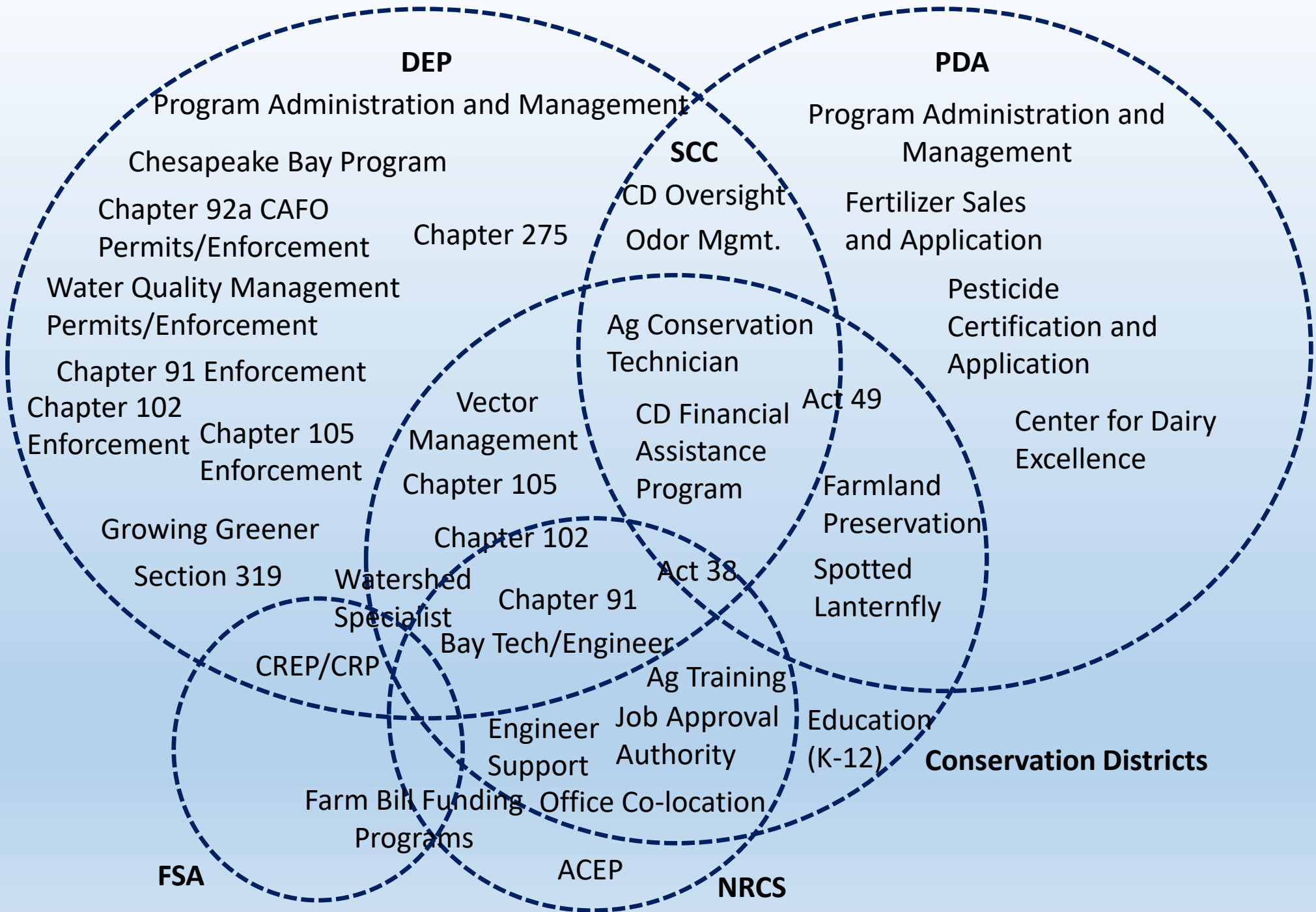
# Snapshot: Pennsylvania Waters

- Pennsylvania Waters:
  - 6 Major Surface Water Basins
  - 85,568 miles of streams
  - 242 publicly owned lakes
  - 125,119 acres of publicly owned lakes
  - 17 square miles of the Delaware Estuary
  - 6 square miles of Presque Isle Bay
  - 63 miles of Great Lakes shorefront
  - 1,999,029 acres of freshwater wetlands
  - 56 acres of tidal wetlands



# Conservation District Law

- 1945 - Conservation District Law instituted the structure for and requirement of Conservation Districts in 66 counties (Philadelphia County does not have a conservation district)
- The State Conservation Commission provides oversight of the Conservation Districts
- DEP and SCC hold joint delegation agreements with the Conservation Districts
- The Board of Directors is appointed by the County Commissioners
- There is an approximate 50/50 split of conservation districts that are housed within their county system and those that are independent
- State and federal funds are provided to support conservation district activities
- County Commissioners allocate local funds to the conservation districts
  - The range is dramatic for independent conservation districts – for example, one district receives approximately \$5,500 per full time staff person while another receives approximately \$36,800 per full time staff person





# Phase 3 WIP - Agriculture Priority Initiatives

- 1. Agricultural Compliance:** Implement Agricultural Erosion and Sediment Control (Ag E&S) Plan or conservation plan, manure management or nutrient management plan, and barnyard runoff controls.
- 2. Soil Health:** Use crop and soil management practices, such as no-till farming and cover crops, that improve long-term soil health and stability.
- 3. Expanded Nutrient Management:** Non-manured farms implement nutrient management plans and precision nutrient management practices.
- 4. Manure Storage Facilities:** Install and use manure storage systems that meet federal standards.
- 5. Dairy Precision Feeding:** Use precision feed management to reduce nitrogen and phosphorus in manure.
- 6. Integrated Systems for Elimination of Excess Manure:** Create integrated (county/regional) programs for removal of or beneficial use of excess manure.
- 7. Forested and Grassed Riparian Buffers:** Plant trees and shrubs or grassy vegetation along streams.



# Pennsylvania's Agricultural Compliance and Inspection Programs

- 1991 - NPDES Concentrated Animal Feeding Operation (CAFO) Program – 20% of all CAFOs inspected annually
  - Ensure compliance with federal Clean Water Act NPDES requirements
- 1993 (effective 1997) – Act 6 Nutrient Management Program – Concentrated Animal Operation (CAO)
- 2005 – Act 38 Nutrient Management Program – 100% of CAOs and CAFOs inspected annually
  - Ensure implementation of Nutrient Management Plan, to include best management practice implementation and record keeping requirements
- 2016 - Chesapeake Bay Agriculture Inspection Program (CBAIP) – 10% of all other agricultural operations inspected annually
  - Ensure compliance with Agriculture Erosion and Sediment Control and Manure Management Planning requirements
- 2020 – CBAIP Phase 2 Pilot – up to 20% of farms inspected by Lancaster, Adams, Chester Conservation Districts and DEP Southcentral and Southeast Regional Offices
  - Ensure compliance with Ag E&S and Manure Management Plan implementation requirements
  - Pilot program instituted in order to identify and overcome challenges prior to expanding more broadly



# Pennsylvania's Expanded Agricultural Inspection Program

- Chesapeake Bay Agriculture Inspection Program (CBAIP)
  - Chesapeake Bay Technicians and DEP Regional Office personnel perform inspections
  - Monitored, tracked, and reported via PracticeKeeper geo-database
    - Collects compliance information as well as BMPs implemented for Chesapeake Bay annual progress reporting
  - Approximately 65% of farms are found to have complete Agricultural Erosion and Sediment Control (AG E&S) and Manure Management (MMP) Plans at the time of the initial inspection
  - Reaches 96% compliance rate at the end of the time frame provided (typically 90-120 days)
  - Farms with continued non-compliance are referred to DEP for enforcement action
    - DEP Chesapeake Bay Program Office handles enforcement of non-compliance with planning obligations
    - DEP Regional Offices handle enforcement of pollution incidents and water quality related compliance issues
  - Planning and technical assistance provided by conservation districts and private consultants
    - Between 85%+ (MMPs) and 95%+ (Ag E&S) of plans are developed with assistance

# Chapter 102 – Erosion and Sediment Control



# Agricultural Erosion and Sediment Control

- Acronyms and Terms:

- Ag E&S – Agricultural Erosion and Sediment Control
- Conservation Plan – NRCS Conservation Plan
- Tolerable Soil Loss (T) over the Rotation
- Sheet and Rill Erosion – erosion that occurs in sheet flow over land
- Concentrated Flow Erosion – erosion that is concentrated (also called “gully erosion”)

- Common Ag E&S BMPs –

- Grassed and Rock-lined Waterways
- Terraces
- Diversions
- Cover Crops
- No-Till and Conservation/Reduced Till
- Roof Gutters and Downspouts (Barnyard Runoff Control)
- Animal Heavy Use Area Protection (Loafing Lot Management)
- Additional BMPs may be included, but are not required, such as:
  - Forest and Grass Buffers
  - Stream fence (Livestock Exclusion Fencing)

# Agricultural Erosion and Sediment Control

- Effective 1972, amended 2010 to include Animal Heavy Use Areas
- Any operation with **plowable/tillable land (to include no-till operations)** **AND/OR**
- Any operation with **Animal Heavy Use Areas** (102.1)
  - (i) barnyard, feedlot, loafing area, exercise lot, or other similar area on an agricultural operation where due to the concentration of animals it is not possible to establish and maintain vegetative cover of a density capable of minimizing accelerated erosion and sedimentation by usual planting methods
  - (ii) The term does not include entrances, pathways and walkways between areas where animals are housed or kept in concentration.
- Combined areas less than 5,000 square feet require BMPs to be implemented to minimize accelerated erosion and sedimentation
- Combined areas equal to or greater than 5,000 square feet require an Ag E&S Plan and BMP implementation to minimize accelerated erosion and sedimentation



# Erosion and Sediment Control and Stormwater

- For earth disturbance activities other than agricultural plowing and tilling or animal heavy use areas the following erosion and sediment control requirements apply:
- E&S BMPs required – earth disturbance activities less than 5,000 square feet.
- E&S Plans and BMPs required – earth disturbance activities equal to or greater than 5,000 square feet and less than 1 acre.
- For earth disturbance related to construction activities 1 acre or greater, a federal National Pollutant Discharge Elimination System (NPDES) permit is required prior to commencing the activity.
  - For any earth disturbance activity that requires a permit and any receiving surface waters of the Commonwealth is classified as High Quality or Exceptional Value under Chapter 93, antidegradation implementation requirements must be satisfied.
- Agricultural E&S Best Management Practices (BMPs) like constructed grassed waterways, terraces, and diversions, where earth moving occurs in order to minimize accelerated erosion and sedimentation on farms are exempt from permitting, as long as the Ag E&S / Conservation Plan includes these practices.



# Chapter 105 – Water Obstructions and Encroachments



# Water Obstructions and Encroachments

- Prevents unreasonable interference with water flow from in-stream construction activities
  - Provides for the regulation and oversight of water obstructions and encroachments in, along, across or projecting into waters of the Commonwealth
  - Assures proper planning, design, construction, maintenance and monitoring of water obstructions and encroachments
  - Most stream/water body/wetland encroachment activities require a permit
  - Many activities can qualify under a General Permit (GP)
  - Federal regulations may apply

# Commonly Used General Permits in Agriculture

- GP-1 Fish- Habitat Structures
  - Authorizes the installation, operation and maintenance of fish habitat enhancement structures including deflectors, elevated boulder structures and half logs in regulated waters of the Commonwealth. Prior approval from PA Fish and Boat Commission is required.
- GP-3 Bank Rehabilitation, Bank Protection and Gravel Bar Removal
  - Authorizes the installation, operation, modification and maintenance of bank rehabilitation and protection projects. It also authorizes the removal of gravel bars that are less than 500 linear feet in length in and along regulated waters of the Commonwealth.
- GP-4 Intake and Outfall Structures
  - Authorizes the construction, operation and maintenance of intake and outfall structures in, along, across or projecting into regulated waters of the Commonwealth.
- GP-6 Agricultural Crossing and Ramps
  - Authorizes the installation, operation and maintenance of agricultural crossings and ramps in regulated waters of the Commonwealth.
- GP-9 Agricultural Activities
  - Authorizes the installation, operation, modification and maintenance of certain agricultural activities that encroach into streams and their floodways or bodies of water. These agricultural activities include: grassed or lined waterways, terraces, diversions, waste storage facilities and spring development. Minor drainage that supports the above activities and is necessary for contour strips when part of an existing agricultural operation and implemented as part of a conservation plan consistent with the Chapter 102 requirements is also included.



# Chapter 275 – Biosolids



# Chapter 275 - Biosolids

- Regulates land application of sewage sludge (biosolids)
  - Monitored and enforced by PA DEP
  - Applied by permit at agronomic rates according to a nutrient or manure management plan
  - Specific setbacks for application rates and other management practices



# Animal Operations



# Nutrient and Manure Management In Pennsylvania

- Common Animal Types:

- Poultry
  - Broiler
  - Layer
  - Pullet
- Livestock
  - Dairy
  - Beef
  - Swine
- Equine
  - Horses
    - Driving
    - Working/Draft
  - Mules
- Other
  - Sheep
  - Goats
  - Alpacas

- Acronyms and Terms:

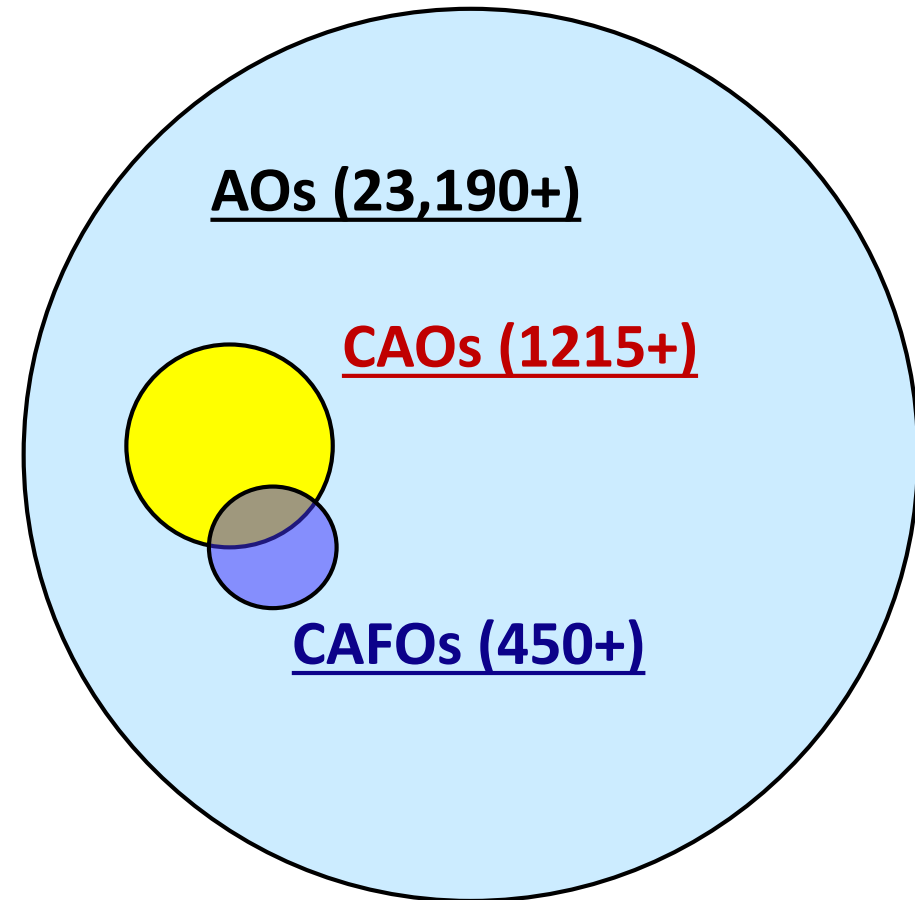
- NMP – Nutrient Management Plan
- MMP – Manure Management Plan
- AEU – Animal Equivalent Unit
  - $AEU = [\text{avg. number of animals on a typical day that the animals are there} \times \text{animal weight (lbs)} \div 1,000] \times [\text{number of days the animals are on the operation per year} \div 365]$

# Nutrient and Manure Management In Pennsylvania

- All farms or entities in Pennsylvania that generate or land apply manure
- Regardless of size
  - Very small – 1 horse
  - Very large – 125,000 broilers
- Regardless of manure origin
  - Includes operations without livestock or poultry
    - Manure imported to operations
- Regardless of application type
  - Mechanically applied or direct application by animals on pasture

# Animal Operations in Pennsylvania

- Concentrated Animal Feeding Operations (CAFOs)
  - Based on animal numbers and/or animal density
  - Farms > 1,000 AEUs, CAOs > 300 AEUs, EPA head numbers
    - Regulated by PA DEP – Delegated from EPA
  - Approved Nutrient Management Plan (**NMP**), DEP CAFO permit, certified planner/certified reviewer, public access
  - Inspected once every five years by DEP
  - Additional requirements of CAOs apply
- Concentrated Animal Operations (CAOs)
  - High animal density farms > 2,000 lbs/acre animal density
    - Regulated by PA SCC – Delegated to Conservation Districts
  - Approved NMP, certified planner/certified reviewer, public access
  - Triennial plan amendments/review
  - Annual status review (inspection)
- All Animal Operations (AOs)
  - All operations generating or utilizing manure
    - Regulated by PA DEP – Delegated to Conservation Districts
  - Manure Management Plan (**MMP**)
  - Plan must be implemented and maintained on site
  - Plan must be provided upon request



# Manure Management Regulations

- Animal Manure Storage Facilities
  - Design and construction criteria for manure storages
  - Liquid or semi-solid manure storage facilities constructed after January 29, 2000 must have been designed and/or certified by a registered professional engineer
  - Includes manure storage freeboard requirements
- Land Application of Animal Manure and Agricultural Process Wastewater
  - Operations that produce or use animal manure/process wastewater must have and implement a written Manure Management Plan, in accordance with the Manure Management Manual
  - CAOs – regulated under Act 38 of 2005 (25 Pa. Code Chapter 83, Subchapter D).
  - CAFOs – regulated under 25 Pa. Code Chapter 92a



# Water Quality Management Permits

- New and / or Expanded Liquid or Semisolid Manure Storages
  - AEU's > 1,000
  - Between 1 - 2.5 million gallon capacity
  - 2.5 million gallons or more
- Design/Construction must be certified by a registered professional engineer as meeting PA Technical Guide standards

# County Snapshot: Lancaster County – Poultry

## Lancaster County 2017 USDA – NASS Census Data

	<u>Layers</u>	<u>Broilers</u>	<u>Other Poultry</u>	<u>Total</u>
Farms	1,045	256	429	<b>1,730</b>
Animal Numbers	13,914,918	11,268,322	4,422,716	<b>29,605,956</b>

## Conservation District Reported via PracticeKeeper Geodatabase

Total Active Plans:	160	151	104	<b>415</b>
CAO Animal Numbers:	499,595	5,078,475	1,025,389	<b>6,603,459</b>
CAFO/CAO Animal Numbers:	11,313,860	2,620,210	3,384,480	<b>17,318,550</b>
CAFO/VAO Animal Numbers:	507,600	271,600	428,100	<b>1,207,300</b>
VAO Animal Numbers:	505	800	1,200	<b>2,505</b>
NRCS 590 Animal Numbers:	420	166,000	0	<b>166,420</b>
MMP Animal Numbers:	813,002	1,316,694	807,806	<b>2,937,502</b>
<b>Total Animal Numbers</b>	<b>13,134,982</b>	<b>9,453,779</b>	<b>5,646,975</b>	<b>28,253,736</b>
<b>CAOs/CAFOs vs Census</b>	<b>89%</b>	<b>71%</b>	<b>109%</b>	<b>85%</b>
<b>Total Documented vs Census</b>	<b>94%</b>	<b>84%</b>	<b>127%</b>	<b>95%</b>

# County Snapshot: Lancaster County – Swine, Beef

## Lancaster County 2017 NASS Data

### Swine

Farms:	316
Animal Number:	313,783

### Conservation District Reported via PracticeKeeper Geodatabase

Total Active Plans:	171
CAO Animal Numbers:	35,200
CAFO/CAO Animal Numbers:	154,222
CAFO/VAO Animal Numbers:	42,120
VAO Animal Numbers:	2,013
NRCS 590 Animal Numbers:	1,878
MMP Animal Numbers:	33,047
<b>Total Animal Numbers:</b>	<b>268,480</b>
<b>CAOs/CAFOs vs Census</b>	<b>74%</b>
<b>Total Documented vs Census</b>	<b>86%</b>

## Lancaster County 2017 NASS Data

### Beef

Farms:	548
Animal Number:	7,456

### Conservation District Reported via PracticeKeeper Geodatabase

Total Active Plans:	219
CAO Animal Numbers:	1,326
CAFO/CAO Animal Numbers:	3,718
CAFO/VAO Animal Numbers:	1,241
VAO Animal Numbers:	336
NRCS 590 Animal Numbers:	82
MMP Animal Numbers:	11,647
<b>Total Animal Numbers:</b>	<b>18,350</b>
<b>CAOs/CAFOs vs Census</b>	<b>84%</b>
<b>Total Documented vs Census</b>	<b>246%</b>

# County Snapshot: Lancaster County – Dairy

Lancaster County 2017 NASS Data		
<u>Milk Cows*</u>		
Farms:	1,613	
Animal Number:	106,429	

**\*Census identifies Milk Cows specifically, but does not specifically call out heifers and calves, so a comparison cannot be made**

## Conservation District Reported via PracticeKeeper Geodatabase

Total Active Plans:	639					
Animal Numbers:	<u>Cows*</u>	<u>Heifers</u>	<u>Calves</u>	<u>Unidentified</u>	<u>Other</u>	
CAO Animal Numbers:	2,655	690	66	2,025		
CAFO/CAO Animal Numbers:	12,365	1,203	95	13,396		
CAFO/VAO Animal Numbers:	3,529	1787	0	955		
VAO Animal Numbers:	558	30	36	669		
NRCS 590 Animal Numbers:	1,104	500	133	2,968		
MMP Animal Numbers:	19,388	10,005	5,397	22,462	<b>Total all Animal Numbers</b>	
<b>Total Animal Numbers:</b>	<b>39,599</b>	<b>14,215</b>	<b>5,727</b>	<b>42,475</b>	<b>102,016</b>	
<b>CAOs/CAFOs vs Census</b>	<b>17%</b>					

# County Snapshot: Lancaster – Equine, Other

## Lancaster County 2017 NASS Data

### Equine

Farms:	2,124
Animal Number:	13,147

### Conservation District Reported via PracticeKeeper Geodatabase

Total Active Plans:	525
CAO Animal Numbers:	474
CAFO/CAO Animal Numbers:	44
CAFO/VAO Animal Numbers:	10
VAO Animal Numbers:	31
NRCS 590 Animal Numbers:	280
MMP Animal Numbers:	5,396
<b>Total Animal Numbers:</b>	<b>6,235</b>
<b>CAOs/CAFOs vs Census</b>	<b>4%</b>
<b>Total Documented vs Census</b>	<b>47%</b>

## Lancaster County 2017 NASS Data

### Other Livestock

Farms:	1,149
Animal Number:	14,732

### Conservation District Reported via PracticeKeeper Geodatabase

Total Active Plans:	146
CAO Animal Numbers:	3,467
CAFO/CAO Animal Numbers:	456
CAFO/VAO Animal Numbers:	241
VAO Animal Numbers:	29
NRCS 590 Animal Numbers:	35
MMP Animal Numbers:	3,929
<b>Total Animal Numbers:</b>	<b>8,157</b>
<b>CAOs/CAFOs vs Census</b>	<b>28%</b>
<b>Total Documented vs Census</b>	<b>55%</b>



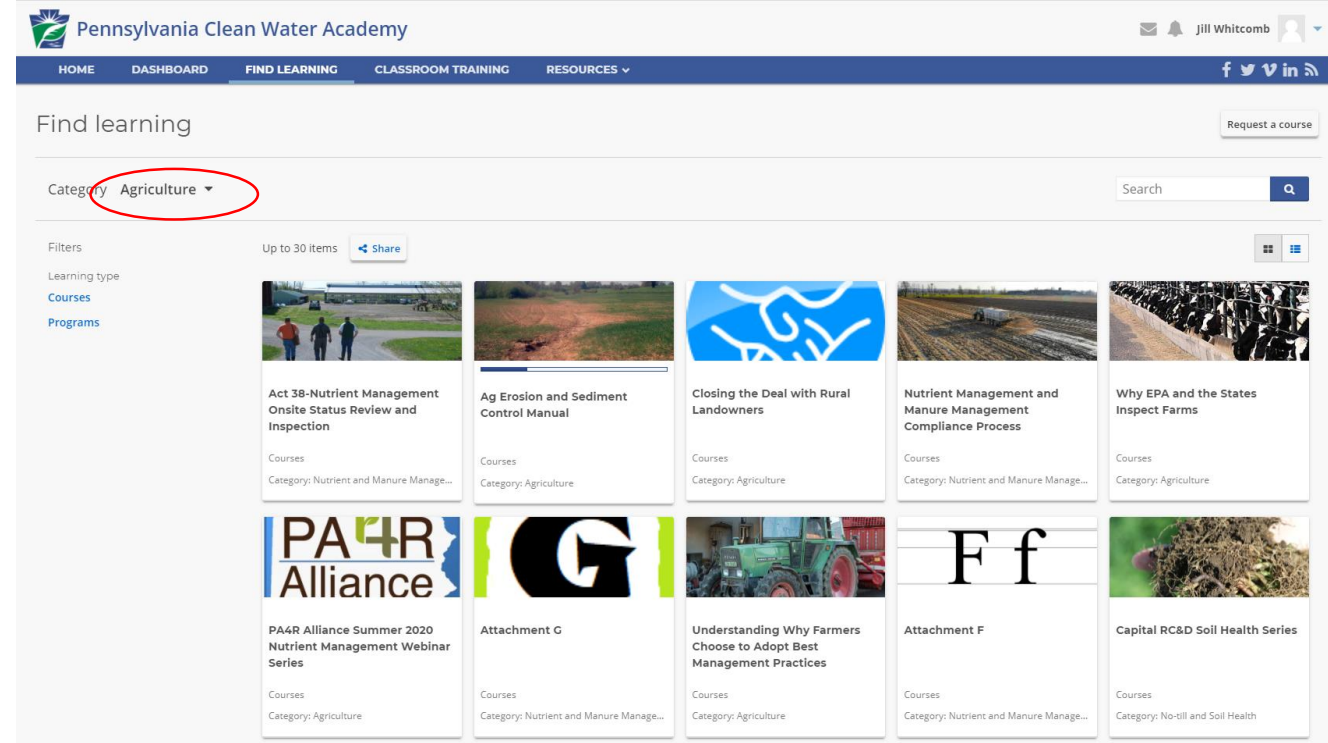
# ▶ Act 49 – Commercial Manure Hauler/Broker Certification



# Commercial Manure Hauler and Broker Certification

- Program requires all owners and employees of a commercial manure hauler or broker business, that commercially haul, land-apply, or broker manure in Pennsylvania to hold a valid certificate issued by the PDA.
  - Continuing Education Credits (CECs) are required
- Ensure that manure generated by agricultural operations is transported and applied in a safe manner.
- Commercial manure haulers or brokers handling or applying manure on behalf of agricultural operations in Pennsylvania must do so according to an Act 38 NMP, Nutrient Balance Sheets (NBS) or other manure management plan (MMP).
- Administered by the SCC, on behalf of PDA.
  - Conservation districts assist with program administration and implementation

# Education and Outreach in a Virtual Setting

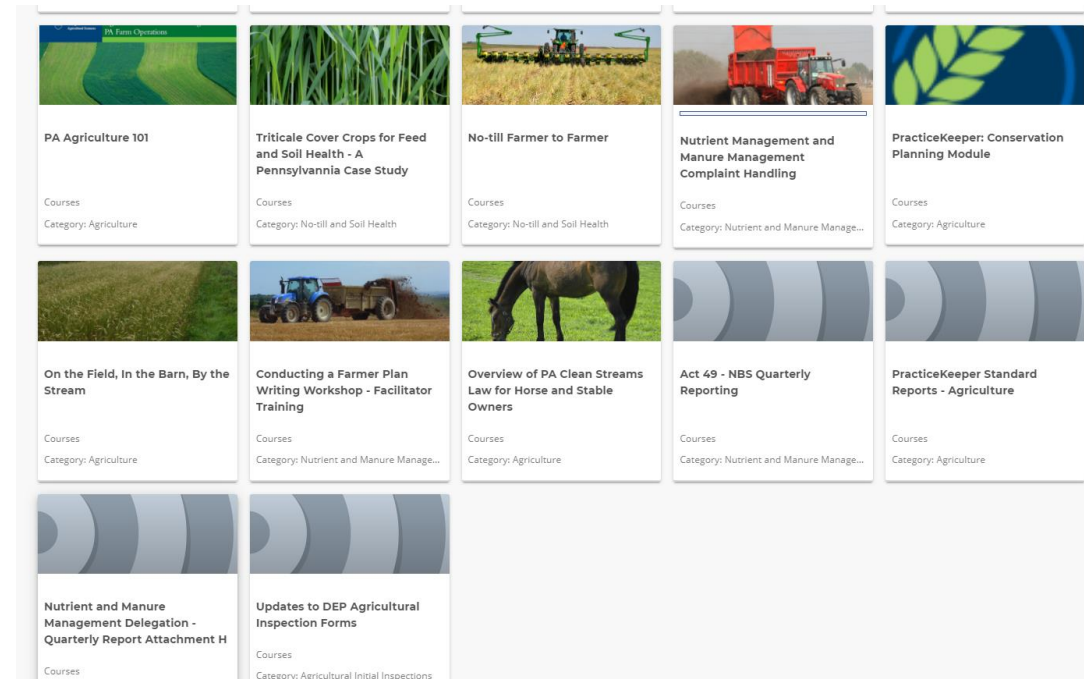


The screenshot shows the Pennsylvania Clean Water Academy website. The top navigation bar includes links for HOME, DASHBOARD, FIND LEARNING, CLASSROOM TRAINING, and RESOURCES. The 'FIND LEARNING' section is active, displaying a search bar and a 'Request a course' button. The 'Category' dropdown menu is set to 'Agriculture'. Below the filters, a grid of course cards is visible, including 'Act 38-Nutrient Management Onsite Status Review and Inspection', 'Ag Erosion and Sediment Control Manual', 'Closing the Deal with Rural Landowners', 'Nutrient Management and Manure Management Compliance Process', 'Why EPA and the States Inspect Farms', 'PA4R Alliance', 'Attachment G', 'Understanding Why Farmers Choose to Adopt Best Management Practices', 'Attachment F', and 'Capital RC&D Soil Health Series'.

## Clean Water Academy Programs

- Agriculture
- Chapter 102 – E&S and PCSM
- Chapter 105 – Dam Safety and Waterway Management
- Chesapeake Bay Clean Water Coordinators
- Mining and Reclamation
- Municipal Stormwater
- Sewage Planning and Municipal Finance
- Sewage and Industrial Waste Permitting

- Training
- Resource Materials
- Recorded Webinars



The grid displays various course cards, including 'PA Agriculture 101', 'Triticale Cover Crops for Feed and Soil Health - A Pennsylvania Case Study', 'No-till Farmer to Farmer', 'Nutrient Management and Manure Management Complaint Handling', 'PracticeKeeper: Conservation Planning Module', 'On the Field, in the Barn, By the Stream', 'Conducting a Farmer Plan Writing Workshop - Facilitator Training', 'Overview of PA Clean Streams Law for Horse and Stable Owners', 'Act 49 - NBS Quarterly Reporting', 'PracticeKeeper Standard Reports - Agriculture', 'Nutrient and Manure Management Delegation - Quarterly Report Attachment H', and 'Updates to DEP Agricultural Inspection Forms'.

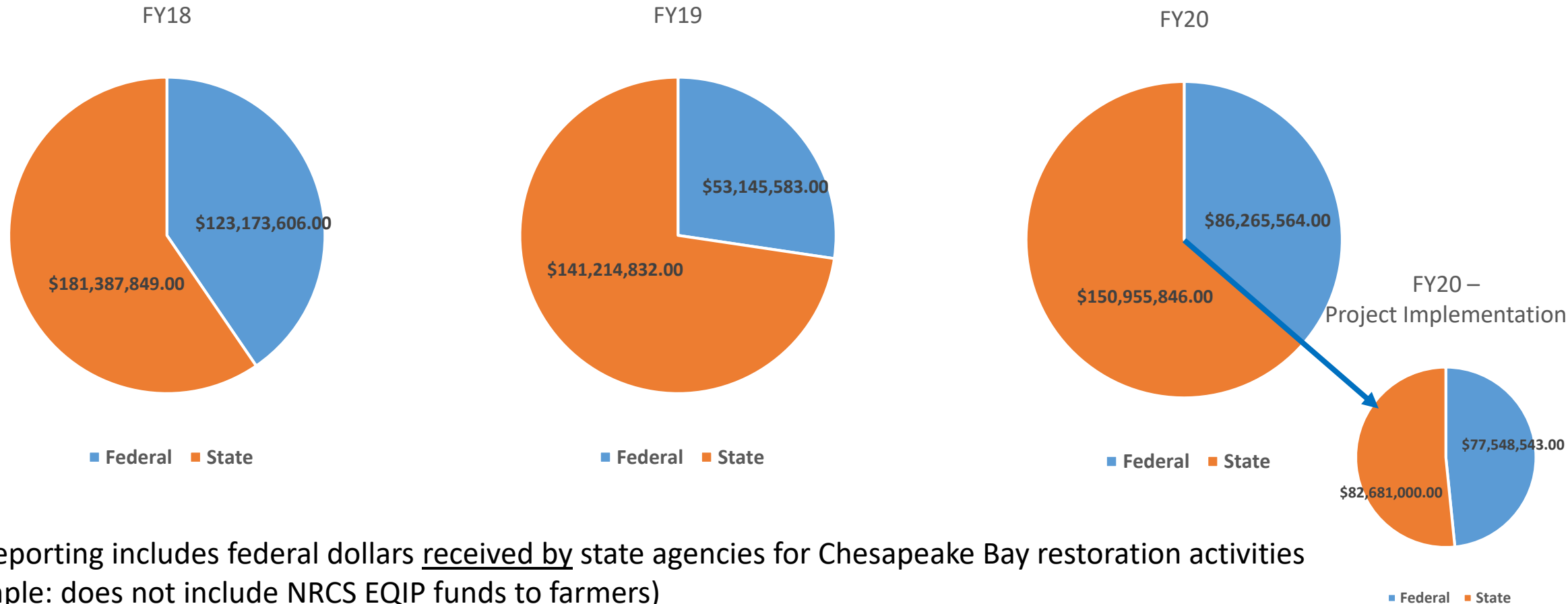
- Sewage Enforcement Officer (SEO)
- State Water Plan
- Water Resources, Protection and Science

# Funding

- Diverse funding sources
- Workload analysis performed as part of Phase 3 WIP development shows more funding is required for technical assistance and program implementation
- Unpredictable nature of funding streams and sources is a challenge

# Chesapeake Bay Accountability and Recovery Act

## Chesapeake Bay Accountability and Recovery Act (CBARA) State and Federal Funding Reporting Requirement





# Federal Snapshot – NRCS Financial and Technical Assistance

October 2019 – September 2020

Chesapeake Bay Watershed (PA)	Count of Contracts	Sum of Obligation	Sum of Contract Acres
ACEP 2018	4	\$158,340	95
AMA 2018	7	\$122,347	39
CSP 2018	90	\$3,329,182	29,175
CSP-GCI 2018	9	\$10,201	116
EQIP 2018	246	\$14,731,550	25,015
RCPP-EQIP 2014	28	\$1,930,331	4,265
<b>Grand Total</b>	<b>384</b>	<b>\$20,281,950</b>	<b>58,705</b>

## Agricultural Land Easements (ALE)

Fiscal Year	Total Enrolled Chesapeake Bay	Total Enrolled Chesapeake Bay Acres	Chesapeake Bay \$\$ Enrolled	Total Closed Chesapeake Bay	Total Closed Chesapeake Bay Acres	Total Closed Chesapeake Bay \$\$
2020	2	95.44	\$158,340.00	4	580.58	\$755,403.00

## Wetlands Reserve Easements (WRE)

Fiscal Year	Total Enrolled Chesapeake Bay	Total Enrolled Chesapeake Bay Acres	Chesapeake Bay \$\$ Enrolled	Total Closed Chesapeake Bay	Total Closed Chesapeake Bay Acres	Chesapeake Bay \$\$ Closed
2020	1	17.60	\$127,394.00	0	0.00	\$0.00

## WRE Restorations

Fiscal Year	Total Restorations Completed	Restored Acres	Restoration Cost
2020	5	67.17	\$196,727.00

Conservation Technical Assistance (CTA) provided = \$4.1 million

# State Snapshot: Funding Sources – Staff and Implementation

- DEP
  - Chesapeake Bay Agricultural Nonpoint Source Abatement
  - Environmental Stewardship Fund / Growing Greener
  - Agriculture Plan Reimbursement Program / Phase 2 Inspection Pilot
- SCC
  - Nutrient Management
  - Resource Enhancement and Protection (REAP)
  - Conservation Excellence Grant
- PDA
  - Farmland Preservation Program
- PENNVEST
  - Project Construction and Implementation

# Chesapeake Bay Agricultural Nonpoint Source Abatement

- Typically \$1.3 - \$2 million annually in state budget
- Funds are used to meet the 1:1 federal match requirement for the EPA Chesapeake Bay Regulatory and Accountability Program (CBRAP) grant
  - Supports staff that perform inspections (CBAIP) and provide planning and technical assistance as a public service to farmers
    - Conservation District Bay Technicians
- Supports agency staff that perform activities to ensure compliance with Pennsylvania's Clean Streams Law and federal Clean Water Act (CAFO) and supports the conservation district functions and activities as it relates to manure management, erosion and sediment control, complaint handling and referrals, etc.
- Supports Non-tidal Network (NTN) monitoring agreements with SRBC

# Environmental Stewardship Fund / Growing Greener

- Act 68 of 1999 – Environmental Stewardship and Watershed Protection
- More than \$540 million available statewide for multiple programs, including but not limited to acid mine drainage and other nonpoint source pollution prevention programs
- Typically \$15 - \$20 million allocated for Chesapeake Bay restoration efforts through the Growing Greener Grant Program

# Environmental Stewardship Fund

- Community Clean Water Coordinator Grant (NEW)
  - \$100,000 per Coordinator, hired or contracted by the county lead entity to coordinate development and implementation of the Countywide Action Plan (CAP)
  - Eight (8) Coordinators for Pilot and Tier 2 Counties
  - Ten (10) Coordinators to share amongst Tier 3 and 4 Counties (26+ counties)
- CAP Implementation Grant (NEW)
  - Allocate up to 50% of Growing Greener Program funds (approx. \$8-16 million) to counties that completed their CAPs throughout the Chesapeake Bay Watershed based on proportion of total Edge of Stream nutrient load to the Bay
  - Funds are to be used to implement projects identified in the CAP that yield high nutrient reductions

# Environmental Stewardship Fund

- Ag Plan Reimbursement Program
  - Instituted in 2016 to support the 2016 Chesapeake Bay Restoration Strategy
  - Provides cost-share assistance to farmers who need to develop Ag E&S, NMP, MMPs to meet the regulatory obligations
  - Administered by two private consultant contractors
  - More than \$2.4 million has been provided as cost-share for plan development
- Chesapeake Bay Ag Inspection Program – Phase 2 Pilot (NEW)
  - Lancaster, Adams, and Chester Conservation Districts; DEP Southcentral and Southeast Regional Offices
  - \$2.5 million available (plus \$300,000 EPA Most Effective Basin) to provide cost-share assistance to farmers for plan implementation to come into compliance with regulations
  - Maximum of \$20,000 per farmer to implement practices like grassed waterways, terraces, diversions, barnyard runoff control, fence, livestock crossings, etc.
  - Complement other funding sources, such as NRCS EQIP



# Nutrient Management Fund

- Typically \$1.54 million annually in the state budget allocated to the Chesapeake Bay Watershed
  - Funds are used to meet the 1:1 federal match requirement for the EPA Chesapeake Bay Regulatory and Accountability Program (CBRAP) grant
    - Supports staff performing duties under the Nutrient and Manure Management Program Delegation
      - Certified Conservation District Nutrient Management Specialists
  - Supports agency staff that perform activities in order to ensure compliance with Act 38, provides oversight and support of conservation district functions and activities, and supports the education and certification program for conservation districts and certified commercial planners

# Resource Enhancement and Protection (REAP)

- Act 55 of 2007 expanded under Act 39 of 2019 (PA Farm Bill)
  - \$13 million in tax credits for FY 2020 for farmers, landowners, and businesses to implement BMPs (proposed or completed projects) that will enhance farm production and protect natural resources; up to \$250,000 per operation w/in 7-year timeframe
  - \$3 million must be used in the Chesapeake Bay Watershed, with a focus on Tier 1 counties
- First-come/first-served, administered by SCC, credits awarded by the PA Dept. of Revenue
- Credits can be used incrementally as needed for up to 15 years to pay PA state income tax; farmers and landowners can elect to sell the credits after 1 year
- Farmers can work with a sponsor to help finance the BMP project; sponsor reimburses the farmer for the installation costs and sponsor receives the credits
- Must have current Conservation/Ag E&S Plan, NMP/MMP, and properly protected barnyards (as applicable) and be on-schedule for full implementation of all BMPs

# Conservation Excellence Grant Program

- Act 39 of 2019 – PA Farm Bill
  - \$2.5 million in state funds for financial and technical assistance for BMPs in Lancaster and York Counties (Tier 1)
  - \$2.6 million in EPA CBIG funds in Cumberland and Franklin Counties (Tier 2)
  - \$1.3 million in EPA CBIG funds in Lancaster County Public-Private-Partnership
- Single grants may not exceed \$250,000; small project grants available for projects under \$25,000
- Administered by SCC; county conservation districts review, rank, and approve applications and monitor project completion
- Priority locations are those designated in Phase III WIP (Tier 1, 2, 3 and 4)
- Priority BMPs include, but are not limited to: livestock exclusion fence, riparian forest buffers, animal waste storage facilities, cover crops

# Farmland Preservation Program

- Act 43 of 1981 and amended by Act 149 of 1988
- Pennsylvania leads the nation in the number of farms and acres permanently preserved for agricultural production
- PA Agricultural Conservation Easement Purchase Program developed to strengthen agricultural economy and protect prime farmland and enables state and county governments to purchase conservation easements from farmers
- Requirements:
  - Minimum 50 acres (or 35 acres if a county allows), or at least 10 acres and utilized for a crop unique to the area, or at least 10 acres and adjacent to an already preserved farm
  - Enrolled in an Agricultural Security Area consisting of 500 acres or more
  - Contain at least 50% of soils which are Land Capability Classes I – IV (defined in USDA-NRCS Soil Survey)
  - Contain at least 50% harvested cropland, pasture, or grazing lands
  - Landowners must exhibit good land stewardship (i.e. implement necessary BMPs)

# PENNVEST – Clean Water State Revolving Fund

- Affordable financing for nonpoint source pollution controls such as agricultural BMPs
- Low interest loans with flexible terms; municipalities and private citizens are eligible
- Applies to BMPs that are implemented according to NRCS standards and specifications
- Funding dependent upon the relative ranking of a project, the economic need, and amount of funding available



# Summary

- The Clean Streams Law was enacted to protect Pennsylvania's water resources and applies to all agricultural operations
- Historic collaboration and tightly-woven connections between local, state, and federal agencies
- Local, state, and federal programs and personnel are of paramount importance to the protection and restoration of Pennsylvania's water resources as well as the preservation and conservation of Pennsylvania's farms
- Increased planning and technical assistance provided by qualified individuals – both public and private – are needed in order to achieve our collective goals
- Pennsylvania has a diverse portfolio of funding sources primarily focused on project implementation
- Predictable funding is necessary to further support personnel and to provide financial assistance for agricultural BMP implementation



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL  
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