Pennsylvania State Technical Committee Meeting

July 24, 2024

Denise Coleman, PA State Conservationist, NRCS, opened the meeting at 1pm and welcomed all participating online and those attending in person. After a few brief comments, she introduced Susan Parry who will be moderating this meeting.

Susan Parry, PA NRCS Assistant State Conservationist for Programs, welcomed all and proceeded to introduce the first speaker.

Ashley Lenig, PA NRCS Conservation Program Manager for CSP, CIG, NWQI, was introduced and made a presentation on 2024 PA CIG (Conservation Innovation Grants). (See attached hand-out) She began by defining CIG as a competitive grant program that is used to stimulate the development and adoption of innovative conservation approaches and technologies in conjunction with agricultural production. The program also is used to gather the "Ingenuity available in both public and private partners and organizations." The program is funded using EQIP (Environmental Quality Incentives Program) funds. The purpose is to provide a program that stimulates innovative approaches that leverage federal investment in environmental enhancement and protection in conjunction with agricultural production. She continued to explain how the program works as well as its' objectives. She explained that CIG does not to fund foundational research, but can fund field research. She explained the types of projects that CIG funds. She noted that the program priorities for 2024 is to improve the "technical toolbox" by addressing the following resource concerns: Carbon Sequestration, Legacy Sediment, Soil Health, Water Quality, Urban Farming and Non-Industrial Private Forestland. She explained eligibility for applicants, and how to apply for the program. She encouraged planning ahead by registering in SAM (System for Award Management), because the registration may take up to 21 business days to complete, as well as the procedures involved in registration, noting that the registration must be renewed annually. She explained the different requirements and components of the Application, to include possible receipt of matching funds from non-federal sources. She discussed deliverables, or the completed step by step objectives desired by the end of each project. She reviewed the steps and requirements involved in the Application Evaluation process by NRCS, as well as the expectations if the grant is awarded. Expectation of the grant, if awarded, were explained in detail. Also explained was the payment eligibility for participating farmers and required financial reports. Upon completion of the project, a final report is made that accounts for all funding expenditures, products, data, barriers encountered and

suggestions for future project management. This report must be completed within 120 days after completion of the grant.

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2024 PA CIG Highlight State Tech Committee Mtng. 7/23/2024

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Introductions

Ashley Lenig

Conservation Program Manager

(CSP, CIG, NWQI)

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What is it?

- **CIG is a competitive grant program to stimulate the development and adoption of innovative conservation approaches and technologies in conjunction with agricultural production.**
- **Gather the "ingenuity available in both public and private partners and organizations."**
- **CIG though different than the Environmental Quality Incentives Program (EQIP) uses EQIP funds.**

Purpose

To provide a program that stimulates innovative approaches that leverage federal investment in environmental enhancement and protection in conjunction with agricultural production.

How does it work?

- **Agreements are 1 to 3 years in length**
- **Single projects may be eligible to receive $5,000 to $75,000 in funding**
- **Require a set of deliverables to be met**

Objectives

- **INNOVATION:**
  - Innovative conservation technologies, management systems, and approaches
    - On-the-ground conservation, including pilot projects and field demos
- **TRANSFER:**
  - programmatic and technical manuals, guides, activities, and references

Not the Objective

- **CIG is not to fund "foundational research," but can fund field research**
- **Used to stimulate the development and adoption of conservation approaches or technologies that have been STUDIED SUFFICIENTLY to indicate a likelihood of success and to be candidates for eventual technology transfer or institutionalization.**

What types of projects?

- **CIG proposals should be innovative.**
- **Proposed projects may augment existing NRCS technical tools (planning, assessment, delivery) to better facilitate conservation on farms.**
- **CIG generally funds pilot projects, field demonstrations, and innovative ways to transfer conservation methods from one geographic area or ag sector to another.**

2024 Pennsylvania Priorities

- **Improve our "technical toolbox" to address these resource concerns:**
  - Carbon Sequestration
  - Legacy Sediment
  - Soil Health
  - Water Quality
  - Urban Farming
  - Non-Industrial Private Forestland

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2024 PA Priorities

CIG Priorities for FY 2024:

- **Carbon Sequestration**
  - Demonstrate conservation practices and management techniques that increase carbon sequestration beyond the conservation practices identified by NRCS (see appendix E, right column).
  - Develop strategies to increase biologic carbon sequestration on farmsteads.

- **Legacy Sediment**
  - Demonstrate and evaluate removal of legacy sediment for restoration of wetlands and endangered species habitat creation
  - Measure effects of restoration- changes in water quality (nutrient levels, temperature, sediment turbidity).
  - Measure effects of habitat creation- changes in fish and macroinvertebrate, amphibian and reptile, and/or plant populations.
  - Measure effects to existing wetland function before and after project.
  - Document real costs related to earth moving and disposal or re-use of sediment.
  - Make cost benefit analysis of effectiveness and impact of this practice.
  - Recommend best management practice for legacy sediment removal and restoration for future related conservation efforts.
  - Examine the costs and effects of natural resources of disposing colonial mill dam sediments in a variety of areas, including urban brownfields, on current agricultural areas, and abandoned mine land.

- **Soil Health**
  - Cover crop establishment following harvest of corn grain in the northern tier counties of Pennsylvania lags behind the rest of the state due to its cooler, wetter climate and shorter growing season. Land Grant University (LGU) researchers have recently refined an innovative cover crop interseeding technique that allows for planting cover crop seed, application of side dress fertilizer and application of post emergent weed control is a single operation when the corn seedlings are at the early 6-leaf/foot-tall stage of development. According to LGU research, this technology is a good fit for northern Pennsylvania and southern New York where late season interseeding establishment of cover crops and post-harvest generally fails. The awardee will demonstrate proof-of-concept through field-scale demonstration of early post emergent interseeding of cover crop into corn across the northern geographies of Pennsylvania.
  - Now widely adopted in Pennsylvania, continuous no-till crop production systems have proven to significantly lower soil erosion while maintaining crop yields and lowering production costs. Benefits of no-till adoption are cumulative over time as infiltration, structural consolidation, and soil health improve over time when soil is undisturbed by tillage. Where manure is surface applied but not

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Eligibility for Applicant

- **Open to all non-federal entities and individuals in the US**
- **Entities must register in SAM**

Conservation Innovation Grants Pennsylvania State Program

Fiscal Year (FY) 2024
Conservation Innovation Grants State Program Pennsylvania
Notice of Funding Opportunity (NFO)
No. USDA-NRCS-PA-CIG-24-NOFO0001398

How to Apply

- **Go to www.grants.gov**
- **Search for Opportunity Number:** USDA-NRCS-PA-CIG-24-NOFO0001398
- **It is anticipated that a total of up to $225,000 will be available to fund multiple projects.**
- **Proposals are due by 11:59pm on 7/31/2024.**

Registering in SAM

- Plan Ahead! Registration may take up to 21 business days to complete.
  - Obtain a Unique Entity Identifier (UEI): All entities need a UEI issued by SAM.gov.
  - System for Award Management (SAM) Registration
    - To register, go to https://www.sam.gov/portal/public/SAM/
    - ***This must be annually renewed.***

Grants.gov

- Visit https://www.grants.gov/
- Click Register
- Add an Organization Applicant Profile to a Grants.gov Account.
- Apply following the instructions in the NOFO

Application Contents:

- Application Form
- Project Narrative
- Team Qualifications
- Assessment of Environmental Impacts
- Declaration of previous CIG projects involvement and past performance

Additional Application Contents:

- Declaration of Historically Underserved and Veteran farmers.
- Standard Form SF424A, Budget Information
- Budget Narrative
- Grants.gov Lobbying Form
- Statement of Current and Pending Support
- SF-LLL, Disclosure of Lobbying Activities
- Negotiated Indirect Cost Rate Agreement
- Disclosure of Potential Conflict of Interest

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SECTION B - BUDGET CATEGOR

6. Object Class Categories	GRANT PROGRAM, FU (1) CIG Federal	(2) Match	Total (5)
a. Personnel	$ 200,000.00	$ 50,000.00	$ 250,000.00
b. Fringe Benefits	40,000.00	10,000.00	50,000.00
c. Travel	10,000.00	0.00	10,000.00
d. Equipment	0.00	52,000.00	52,000.00
e. Supplies	44,000.00	10,000.00	54,000.00
f. Contractual	20,000.00	220,000.00	240,000.00
g. Construction	0.00	0.00	0.00
h. Other	22,000.00	0.00	22,000.00
i. Total Direct Charges (sum of 6a-6h)	336,000.00	342,000.00	$ 678,000.00
j. Indirect Charges	38,000.00	32,000.00	$ 70,000.00
k. TOTALS (sum of 6i and 6j)	$ 374,000.00	$ 374,000.00	$ 748,000.00

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Matching Requirement (1:1)

- **May receive a grant of up to 50% of the total project cost.**
  - Required to match the USDA funds awarded on dollar-for-dollar basis from non-federal sources with cash and in-kind contributions.

Deliverables

- **Are clearly outlined in the agreement**
- **Report progress on them**
- **Meet all by expiration date**
- **Include an accounting of these items in the final report**

Application Evaluation

- **Reviewed**
  - Technical Panel
  - Whole Project
  - 100-point total

- **Criteria**
  - Purpose, Approach, and Goals
  - Innovative Technology or Approach
  - Project Management
  - Benefits and Transferability

Expectations if Awarded

- **Comply with state, local, federal regulations and ordinances.**
  - Endangered Species Act
  - Natural Historic Preservation Act
  - Clean Water Act, NEPA, applicable laws
- **Implements any required Environmental and Cultural Resources mitigation/monitoring**
- **Provides technical assistance towards project completion**
- **Complies with requirements in the grant, Executive orders, OMB circulars, and 7 CFR**

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Payment Eligibility for Participating Farmers

- **Ensures EQIP eligibility for any participants receiving direct or indirect payments.**
- **Submits a list of EQIP-eligible producers receiving direct or indirect payments as part of the semiannual reports and final report.**
- **Ensures that payments to EQIP-eligible producers do not exceed individual EQIP payment limitations.**

Progress Reports

- **Provides written performance progress reports**
- **To the CIG Program Manager and Technical Contact**
- **Every 6 months**
- **Can be more often if desired**

Reimbursement Requests

- **Submits SF-270, "Request for Advance or Reimbursement,"**
- **With supporting documentation that details the work performed and conforms to the expenses being requested**
- **To the NRCS programmatic contact.**
- **Complies with requests for information from assigned NRCS programmatic, technical, and administrative contacts.**

Financial Reports

- **Provides an accounting of expenses incurred and amount received to date**
- **To the CIG Program Manager**
- **Must match up to previous financial report and payments made to date**
- **Usually completed in conjunction with the progress report and reimbursement request**

Final Report

- **Provides a final report**
- **To the CIG Program manager and technical contact**
- **Accounts for the deliverables in the agreement and findings/conclusions**
  - Products, data, barriers, suggestions
- **Within 120 days after the completion of the grant**
  - Plan on submitting a draft within 90 days

CIG Questions and Answers

Tim Peters, PA NRCS State Engineer, was introduced and provided information concerning Training Opportunities for Conservation Planning and Technical Assistance. (See attached hand-out) Tim covered the following areas in his presentation: In-State offered courses, Nationally offered NRCS trainings, On-the-job and mentoring and Training contributions. Starting off, he discussed Conservation Planner training. This training is designed for NRCS and Partner employees wanting to become designated in the four levels Certified Planners. The course involves nine steps of conservation planning, which he explained in detail. He presented the details of participation including attendance numbers from FY2022 until the present. He also discussed the two phases (levels) of Boot Camp Trainings that are held each year. This training is presented as a combination of Virtual classes, In-Person Classes. Level I topics covered are: Laws and regulations; Basic Soils; Resource tools; Introduction to Cropland, Livestock, Pasture Management, Fish and Wildlife; Basic Survey Skills; Visits to Soil Pits, Identify Pasture Concerns and Crops; Basic Hydrology Skills. Level II topics covered are: Avoid/Control/Trap, Financial Assistance, JAA; Advanced Forestry Concepts; Ag Waste Planning; Economic Tools; Addressing Resource Concerns via Field Rotations (Pasture, Crop, Farmstead); and Urban Farm Rotation with discussions. Level II Agronomy instruction includes: Soil Health/Soil Quality Practices; Advanced Soils with Field Rotations; and Advanced Pasture, Pasture Planning and Design Tools. Level II Engineering includes: Basic Hydraulics Concepts and Applications; Soils in Engineering/Unified Soils Classification Systems; and Quality Control/Quality Assurance which includes Field Inspection and Concrete Testing. He provided participation numbers from FY 2022 until the present.

Tim followed up his presentation with engineering updates that are going on throughout the quarter. He introduces multiple new standards including: CPS 316: Animal Mortality Facility (new criteria is preprocessing mortality, forced air compression, and Alkalike Hydrolysis and Dehydration.), CPS 366: Anaerobic Digester (new criteria is an added section for accounting for effects on nutrients, and new wording on gas control and utilization.), CPS

367: Roofs and Covers (new criteria included flexible geomembrane cover materials have updated thickness requirements.), CPS 468: Lined Waterway or Conveyance Channel (Name changed from Lined Waterway or Outlet, Added criteria to evaluate aquatic organism passage, new wording for thermal movement in concrete linings, and new considerations sections for climate and downstream sources.), Other standards with minor wording changes (447 Irrigation water and tailwater recovery, 500 Obstruction removal, 527 Sinkhole Treatment, 614 Watering trough, 554 Drainage water management, 600 Terrance, 608 Surface drain and main lateral, 620 Underground outlet, and 638 Water and sediment control basin). Tim reveals two new standards that are coming soon: 313 Water storage facility, and 521 Pond sealing or lining, Geomembrane or Geosynthetic clay liner. He announces new engineering tools to look out for as well, which include: Simple water system design package, Animal walkway design package, and Access road design package.

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State Technical Committee Engineering Update 7/24/2024

FARM PRODUCTION AND CONSERVATION
FSA | NRCS | RMA | Business Center

Overview

- Standards
- Engineering Design Guides

CPS 316 Animal Mortality Facility

- New Criteria
  - Preprocessing of mortality
  - Forced air composting
  - Alkaline Hydrolysis and Dehydration

- Other minor changes to improve clarity

CPS 366 Anaerobic Digester

- Added section for accounting for effects on nutrients
- New wording on gas control and utilization

- Other minor changes to improve clarity

CPS 367 Roofs and Covers

- Flexible geomembrane cover materials have updated thickness requirements

- Other minor changes to improve wording

CPS 468 Lined Waterway or Conveyance Channel

- Name changed from Lined Waterway or Outlet
- Added criteria to evaluate aquatic organism passage
- New wording for thermal movement in concrete linings
- New Considerations sections for climate and downstream water sources

Other Standards with Minor Wording

- 447 Irrigation Water, Tailwater Recovery
- 500 Obstruction Removal
- 527 Sinkhole Treatment (Name changed from Karst)
- 614 Watering Trough
- 554 Drainage Water Management
- 600 Terrace
- 608 Surface Drain, Main Lateral
- 620 Underground Outlet
- 638 Water and Sediment Control Basin

Other Standards Coming Soon

- 313 Waste Storage Facility
- 521 Pond Sealing or Lining, Geomembrane or Geosynthetic Clay Liner

Coming Engineering Tools

- Simple Water System Design Package
- Animal Walkway Design Package
- Access Road Design Package

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Training Opportunities for Conservation Planning and Technical Assistance

FARM PRODUCTION AND CONSERVATION
FSA | NRCS | RMA | Business Center

Overview

- IN-State Offered Courses
- Nationally Offered NRCS Trainings
- On-The-Job and Mentoring
- Training Contributions

Introduction to Conservation Planning

- Introductory Course
  - NRCS and Partner employees wanting Conservation Planner designation
  - 9 Steps of Conservation Planning
  - Resource Concerns and Planning Criteria introduced
    - SWAPA + HE (Soil, Water, Animals, Plants, Air, Human, & Energy)
    - Cropland
    - Pasture
    - Farmstead
    - Forests
  - Conservation Plans introduced and defined

Intro to Conservation Planning Numbers

- Trainers
  - 9 NRCS Instructors
- Attendees
  - FY 2024 - 30
    - 10 NRCS
    - 20 Partners
  - FY 2023 - 33
    - 14 NRCS
    - 19 Partners
  - FY 2022 – 25
    - 10 NRCS
    - 15 Partners

Boot Camp Level I – Identifying RCs

- (3) Virtual Mornings & (4) In-Person Days in Lewisburg
- Partnership – SCC/PACD/NRCS
- NRCS / Penn State Instructors
- Topics:
  - Laws and Regs
  - Basic Soils
  - Resource Tools
  - Intro to Cropland, Livestock, Pasture Management, Fish and Wildlife
  - Basic Survey Skills
  - Visit Soil Pits, Identify Pasture Concerns, Crops
  - Basic Hydrology Skills

Boot Camp Level I Numbers

- Trainers
  - 23 NRCS Instructors
  - 12 Penn State Instructors
- Attendees
  - FY 2024 - 36
    - 7 NRCS
    - 29 Partners
  - FY 2023 - 91
    - 23 NRCS
    - 68 Partners
  - FY 2022 – 34
    - 16 NRCS
    - 18 Partners

Boot Camp Level II - Combined

- (2) Virtual Mornings & (5) In-Person Days at NRCS SO/FITG
- Partnership – SCC/PACD/NRCS
- NRCS Primary Instructors
- Topics
  - Avoid/Control/Trap, Financial Assistance, JAA
  - Advanced Forestry Concepts, Ag Waste Planning
  - Economic Tools
  - Addressing Resource Concerns via Field Rotations (Pasture, Crop, Farmstead)
  - Urban Farm Rotation and Discussions

Boot Camp Level II - Agronomy

- Soil Health/Soil Quality Practices
- Advanced Soils with Field Rotations
- Advanced Pasture, Pasture Planning and Design tools

Boot Camp Level II - Engineer

- Basic Hydraulics Concepts and Applications
- Soils in Engineering / Unified Soils Classification System
- Quality Control / Quality Assurance
  - Field Inspection
  - Concrete Testing

Boot Camp Level II Numbers

- Trainers
  - 27 NRCS Instructors
- Attendees
  - FY 2024 – 57
    - 18 NRCS
    - 39 Partners
  - FY 2023 - 34
    - 15 NRCS
    - 19 Partners
  - FY 2022 – 26
    - 17 NRCS
    - 9 Partners

Conservation Planning, Part 2

- Commonly known as Certified Planner Training
- Final Course before an individual receives the Level 3 Certified Conservation Planner Designation
- Course Curriculum is comprised of 34 trainings
  - Online webinars- 26
  - In person trainings- 8
- Reiterates 9 Steps of Conservation Planning
- Environmental Evaluation fully defined/explained
- Reviews Job Approval Authority, Practice Certification

Conservation Planning, Part 2 Numbers

- Trainers
  - 9 NRCS Instructors
- Attendees
  - FY 2023 – 8
    - 5 NRCS
    - 3 Partners
  - FY 2022 - 18
    - 14 NRCS
    - 3 Partners
    - 1 TSP
  - FY 2021 – 12
    - 10 NRCS
    - 2 Partners

Cultural Resources Training

- Defining CR, Federal Law, Policies
- Interaction with State Historical Preservation Office
- Common CR on Farms
- Two Sessions in FY24
  - Up to 30 attendees each

Civil 3D (AutoCAD)

- Basic Civil 3D Concepts
  - Data Collection to Map Development
- Held as needed (once per year)
- Small Sessions (8-10 max)
- Scheduled for December in Lewisburg

Annual PA NRCS Engineering Workshop (Winter)

- Virtual – One Day
- Manure Management Technologies
- Current Engineering Topics
- PE PDH Offered

- Typical Attendance >100

ACA & Manure Storage

- Act 38 Partnership – Two Annual Sessions
- (1) Virtual Morning & (1) In Person Day
- Evaluating ACA and Manure Storages
- BMPs for addressing inadequate practices/resource concerns
- 3-4 Farm Rotation
  - Evaluate Multiple ACAs vs Pasture
  - Review Multiple Storages
  - Discuss Opportunities
  - Application Activity
- Attendees – 11 NRCS & 22 Partners (First Session)

National Trainings

- Concrete Fundamentals
- Construction Inspection for Field Office Activities
- Construction Inspection Project Activities
- Liner Design for Animal Waste Containment

Area Specific

- Technical Training Topics
  - Surveying with GPS Survey Grade Equipment
  - Construction Inspection Topics
  - Hydrology Topics
  - Water System
  - Terrace and Grassed Waterway Design

OTJ / ACES

- Informal / Intimate training continues
- Technical Staff (SO, AO, Experienced FO)
  - Oversee, Review Work, and Mentor
- ACES Training Cadre
  - Six Employees

Training Contributions

- PA NRCS Provided 40 Trainings (Last 18 Months)
- 81% of Trainers
- Partners = 56% of Audience

Dan Ludwig, PA NRCS State Resources Conservationist, was introduced and announced that the department is fully staffed! (See attached hand-out) Two practices have been released (612-tree/shrub establishment/655-forest trails and landings), and the 30-day comment period is now open. Dan introduced interim practice standards that the state has proposed: 805-Amending soil properties with lime, 822-Nonruminant livestock outdoor management of vegetative cover, 827- Strategic harvested forage management, and 828-Wildlife habitat site preparation. He finished the presentation by reiterating that the conservation planning trainings are coming up.

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Ecological Sciences Update

Dan Ludwig
State Resource Conservationist

Eco Sciences Staffing

- Fully Staffed as of May 19, 2024

- Dan Ludwig- State Resource Conservationist
- Mark Goodson- State Agronomist
- Dayanna Barnes- Resource Conservationist
- Brian Campbell- State Grazing Specialist
- Beth Sassaman- State Wildlife Biologist
- Chris Peters- State Forester

Practice Standards

- 2 Practices have been released and 30-day comment period is now open

- 612- Tree/Shrub Establishment
- 655- Forest Trails & Landings

- Please send any comments to Chris Peters, State Forester

Interim Practice Standards

- PA is looking to adopt the following for FY2025:

- 805- Amending Soil Properties with Lime
- 822- Nonruminant Livestock Outdoor Management of Vegetative Cover
- 827- Strategic Harvested Forage Management
- 828- Wildlife Habitat Site Preparation

Training

- May 2024- Intro to Conservation Planning
  - 30 attendees
- Conservation Planning, Part 2
  - Sept 16-20th- State College
- Intro to Conservation Planning
  - Nov 19-21st- Lebanon

Natural Resources Conservation Service

CONSERVATION PRACTICE STANDARD

TREE-SHRUB ESTABLISHMENT

CODE 612

(ac)

DEFINITION

Establishing woody plants by planting, direct seeding, or through natural regeneration.

PURPOSE

This practice is used to accomplish one or more of the following purposes:

- Maintain or improve desirable plant diversity, productivity, and health by establishing woody plants.
- Improve water quality by reducing excess nutrients and other pollutants in runoff and ground water.
- Restore or maintain native plant communities.
- Control erosion.
- Create or improve habitat for target wildlife species, beneficial organisms, or pollinator species compatible with ecological characteristics of the site.
- Sequester and store carbon.
- Conserve energy
- Provide livestock shelter

CONDITIONS WHERE PRACTICE APPLIES

Tree-shrub establishment can be applied on any site capable of growing woody plants.

CRITERIA

General Criteria Applicable to All Purposes

Select one or more species that are suited to site conditions, appropriate for the planned purpose(s). Utilize ecological site descriptions, natural plant communities, conservation tree and shrub guides, or comparable reference sites to guide species selection.

Determine desired stocking levels for trees and/or shrubs based on landowner objectives and ecological characteristics of the site and species. Plant, seed, or naturally regenerate at densities and rates that reflect anticipated seedling mortality to achieve desired stocking levels in the established stand. Utilize the PA NRCS Practice Guide for Tree and Shrub Establishment to specify species, planting rates, spacing, methods and timing of planting.

Use NRCS Conservation Practice Standard (CPS) Tree-Shrub Site Preparation (Code 490) to prepare sites for planting, seeding, or natural regeneration if conditions are not suitable for establishing the desired plants. Use NRCS CPSs Brush Management (Code 314), Herbaceous Weed Treatment (Code 315), or Prescribed Burning (Code 338) after planting, as needed, to create desirable conditions for establishing the desired plants. Modify forest stand conditions as needed, using CPS Forest Stand Improvement (Code 666), to create favorable stand structure for initiating natural regeneration.

When utilizing natural regeneration to establish trees and/or shrubs, an adequate source of seed, vegetative propagules, or advanced regeneration must be present or planned at a level sufficient to achieve objectives. Where natural regeneration relies on seed sources, apply any needed stand treatments and site preparation at appropriate times to facilitate germination and establishment of seeds from desired species. Modify forest stand conditions prior to initiating natural regeneration to obtain the desired species composition, density, and arrangement of trees and shrubs as needed, using supporting conservation practices.

Implement coppice regeneration (originating from root shoots or stump sprouts) based on suitability of tree species, age, diameter, and site conditions. Determine the correct timing for coppice regeneration based on species characteristics.

Select only viable, high-quality, and adapted plant materials. Do not establish species on the Federal or State Invasive Species or Noxious Weed lists. Select planting stock that conforms to established seed transfer protocols within the State and complies with minimum standards accepted by the American National Standards Institute (ANSI). Choose planting dates, techniques, and handling methods appropriate for the site conditions to increase rates of survival. Select species and adjust timing of establishment to minimize potential effects of known residual herbicides, as needed.

Evaluate the site to determine if mulching, supplemental water, or other cultural treatments (e.g., tree protection devices, shade cards, brush mats, etc.) are needed to ensure adequate survival and establishment, then utilize the appropriate supporting conservation practice. Minimize the need for supplemental water and/or nutrients by choosing site-adapted plant materials, planting methods, and planting seasons. Alter species selection and/or timing of planting/seeding to minimize potential effects of residual chemical carryover, as needed.

Protect tree and shrub plantings, seeded areas, and naturally regenerated areas from unacceptable adverse impacts from insects, disease, wildlife, livestock, and fire. Apply supporting practices and treatments as necessary to protect establishing trees and shrubs. Utilize the PA NRCS Practice Guide for Tree and Shrub Establishment for protection specifications. Protect from pests, as necessary, by applying integrated pest management techniques for pest prevention, avoidance, monitoring, and suppression.

Use tree and shrub planting to supplement natural forest regeneration in locations where additional species or stem densities are desired to meet management objectives. Do not plant trees and shrubs under an overstory scheduled for harvest before seedlings have become established.

Additional Criteria for Reducing Nutrients and Pollutants

When plantings are used to remove excess nutrients from runoff or ground water, select species that have fast-growth characteristics, extensive root systems, and a high-nutrient uptake capacity. Use tree and shrub species that are tolerant of the types of pollutants contained in effluent or soils at the site.

Additional Criteria forControlling Erosion

Utilize plant material that are adapted to the hydrologic zone and region. Chose plant materials that have fast-growth characteristics and extensive horizontal spreading root systems that allow for reductions in site erosion but do not restrict channel capacity.

Additional Criteria for Restoring or Maintaining Native Plant Communities

Species selected for planting, seeding, or those favored in natural regeneration that are native to the site and will create a successional state that progresses toward the identified target plant community.

Additional Criteria for Wildlife Habitat

Select tree and shrub species that provide food, cover, or connectivity to target wildlife species, including pollinators and beneficial organisms, as supported by a State approved wildlife habitat assessment, a specialist's (e.g., biologist) report, or wildlife habitat management plan.

Additional Criteria for Sequestering and Storing Carbon

Maximize carbon storage by selecting tree and shrub species that have longer life spans, the ability to reach a large size, high wood density, and the potential for use in long-lived wood products. To meet both short and long-term objectives of a site, establish fully stocked stands for the selected rotation to sustain growth and vigor potential. Build forest resilience by favoring community composition and structural diversity of a site.

Additional Criteria to Conserve Energy

Increase energy efficiency by planting trees to provide shade for buildings. Use proper plant densities to optimize the shade produced. Select plants with a potential height growth that will be taller than the structure or facility being protected. Design tree and shrub plantings to avoid damage to structures and to allow adequate space for maintenance access to walls and windows. Plant at a distance that is greater than mature crown spread, and select species that develop deep root systems. To protect structures from heat loss due to wind, use NRCS CPS Windbreak/Shelterbelt Establishment and Renovation (Code 380).

Additional Criteria for Livestock Shelter

Select trees with growth rates and crown characteristics to provide livestock adequate shade. Protect trees from livestock. Manage livestock with NRCS CPS Prescribed Grazing Plan (Code 528).

CONSIDERATIONS

Utilize plant materials that have been selected and tested in the NRCS Plant Materials Program or in similar tree and shrub improvement programs when specific performance elements are necessary. Plant materials used for planting treatments can include bare-root stock, containerized stock, seed, stem or root cuttings, or layered bows. Consider the potential impacts of extreme weather events (e.g., drought, flooding, wind, late spring frosts) when selecting plant species and sites for planting. Select trees and shrubs adapted to the site's natural disturbance regime. If planting in existing forestland, select tree species based on the existing forest's species traits, successional status, structure, and composition. Consider whether the species, variety, or cultivar possesses aggressive traits, and whether it poses a potential threat to the existing or desired plant community.

Use diverse tree and shrub species combinations which best meet the needs of target wildlife and pollinator species. Enhance wildlife habitat structure in existing forest stands by establishing additional trees and shrubs in the understory. Select tree and shrub species that produce hard or soft mast utilized by targeted wildlife species.

When using trees and shrubs for carbon sequestration and storage, consider using modeling tools to predict carbon sequestration rates and amounts of stored carbon.

Design tree-shrub arrangement and spacing to allow for and anticipate the need for future access lanes for purposes of stand management and fire control. Establish species with growth rates and at densities that make them competitive with weeds and undesirable plants. Consider incorporating culturally significant species into establishment design.

Consider designing plantings to enhance visual quality in farmsteads, recreation areas, and along public rights-of-way, by incorporating foliage color, season and color of flowering, mature plant height, edge-feathering, and other landscaping techniques to meet client's management objectives and concerns.

Considerations for Organic Systems During Vegetation Establishment

For USDA certified-organic and transitioning-to-organic operations, all materials and methods must comply with the USDA National Organic Program Standards, including all seeds, planting stock, and fertilizers. Use NRCS CPS Mulching (Code 484) to support tree and shrub establishment by controlling competing vegetation with natural mulches, such as wood products or hay, as a viable alternative to using herbicides. Certified weed-free mulches are preferred.

Invasive plant species may be controlled through mulching with fully biodegradable materials; mowing; livestock grazing with protection for plantings; manual pulling and cutting; mechanical cultivation; pre-irrigation; flame, and heat or electrical means. NRCS CPS Prescribed Burning (Code 338) may be used to control diseases and stimulate seed germination.

Pests may be managed through augmentation or introduction of predators or parasites and development of habitat for natural enemies of pests; non-synthetic controls such as lures, traps, and repellents may be used.

Considerations for Reducing Energy Use

When trees and shrubs are planted to reduce summer energy use in buildings, consider prioritizing their placement based on the greatest daily solar heat gain (typically the west side). Trees or shrubs planted within 30 to 50 feet of a building generally provide effective shade to windows and walls, depending on tree height potential. Evaluate tree and shrub crown and root spread characteristics before establishing near structures. Deciduous tree or shrub species planted adjacent to the south side of buildings in cool climates can provide shade in the summer yet allow sun to reach the building in winter.

PLANS AND SPECIFICATIONS

Prepare plans and specifications that describe requirements for applying the practice to achieve its intended purpose and obtain any required permits.

Use Implementation Requirements or other acceptable documentation. At a minimum, provide—

- Objective(s) for establishment.
- Drawings and details when appropriate.
- Map showing the location of tree and shrub establishment areas.
- Soils map and description of soils and ecological sites (if available).
- Establishment method by species or vegetation type.
- Number of trees and shrubs per acre to be established, by species.
- Timing of establishment treatments relative to seasonal factors, plant physiology, disease, insects, and wildlife impacts.
- Mitigation measures, if needed, to reduce damage from wildfire hazard or potential pests.
- Maintenance measures, if needed, on installed plant protection structures (regeneration area protection fencing or tree shelters)

OPERATION AND MAINTENANCE

Prepare an Operation and Maintenance Plan for the site. As a minimum, include the following activities:

- Manage competing vegetation (including Federal or State Invasive Species and Noxious Weeds), as needed, until the desired trees and shrubs are established without competing for sunlight, water, or nutrients.
- Maintain the health of the established plant community with appropriate management techniques including periodic mowing, herbicide treatments, or prescribed burning, as needed. Do not conduct maintenance practices and activities during the primary reproductive period of wildlife. Exceptions can be considered to maintain the health of the vegetation if such exceptions do not conflict with agency requirements.
- Control access by vehicles and equipment during or after tree-shrub establishment to protect new plants and minimize erosion, compaction, and other site impacts.
- Inspect the site at appropriate time intervals following planting, seeding, or natural regeneration to determine whether the survival rate for trees and shrubs meets the intended practice purposes and client objectives. When survival is not adequate to meet the intended objective, replant or

supplement the planting as needed to meet the management goals.

- Periodically inspect established trees and shrubs and protect them from adverse impacts of insects, diseases, competing vegetation, fire, livestock, wildlife, nonfunctioning tree shelters, weed barriers, etc.
- Apply nutrients to maintain vigor of desirable trees-shrubs, as needed.

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Burns, R.M. and B.H. Honkala, tech. coords. 1990. Silvics of North America: 1. Conifers; 2. Hardwoods. Agriculture Handbook 654. USDA Forest Service. Washington, D.C.

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Talbert, C. 2008. Achieving Establishment Success the First Time. Tree Planters Notes 52(2):31-37.

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Natural Resources Conservation Service

CONSERVATION PRACTICE STANDARD

FOREST TRAILS AND LANDINGS

CODE 655

(ac)

DEFINITION

A temporary or infrequently used route, path, or cleared area.

PURPOSE

This practice is used to accomplish the following purpose–

- Providing unimproved or seasonal routes for temporary or infrequent travel by people or equipment for forest management activities.

CONDITIONS WHERE PRACTICE APPLIES

Forest land that needs temporary access to facilitate conservation activities.

CRITERIA

General Criteria Applicable to All Purposes

Design trails and landings to be the appropriate size, gradient, number, and location to accomplish the intended purpose. Avoid locating trails and landings on poorly suited soils of low-bearing strength or environmentally sensitive sites such as wetlands, riparian areas, and critical wildlife habitat. Locate and minimize the number and size of trails and landings to reduce adverse onsite and offsite impacts such as accelerated erosion, slope failure, water quality, and riparian area degradation, stream channel and streambank damage, hydrologic modification, reduced aesthetic values, damage to advance regeneration or residual growth stock, or fragmentation of wildlife habitat. Use topographic maps and aerial photos to locate trails on the contour and limit the need for excavation to the greatest extent possible and incorporate breaks in grade (rolling dips or rolled grades) for trails on slopes. Set back trails and landings from water bodies and water courses to the greatest extent possible. Minimize the size and number of stream crossings and use criteria in NRCS Conservation Practice Standards (CPSs) Aquatic Organism Passage (Code 396) and Stream Crossing (578).

Assure safe ingress and egress from trails and landings to junctions with existing roads. For road intersections, use criteria in NRCS CPS Access Road (Code 560). Control access to trails and landings as needed for erosion abatement, safety and liability, and reduced maintenance costs.

Minimize the need for new trails and landings and their associated impacts, by designating trails and landings intended or anticipated for forest management activities in subsequent years for reuse.

Ensure appropriate timing and use of equipment for site and soil conditions to maintain site productivity and minimize soil rutting, erosion, displacement, and compaction. Prevent the introduction and spread of non-native invasive species by implementing measures such as equipment cleaning. Implement applicable State best management practices for log skidding that meet the specific site requirement(s) and accomplish the intended purpose.

Integrate drainage and erosion control measures with trails and landings and locate measures to minimize detrimental effects of concentrated flow, erosion and sedimentation rates both during and after trail/landing use. Restore and stabilize stream crossings after use, as needed. Refer to applicable drainage and erosion-sedimentation prediction technology and use criteria in NRCS CPSs Critical Area Planting (Code 342), Structure for Water Control (Code 587), Aquatic Organism Passage (Code 396), Stream Crossing (Code 578), and Mulching (Code 484), as well as State forestry best management practices, as applicable.

CONSIDERATIONS

Consider utilizing LiDAR or other technology to obtain the latest site information to aid in the planning and design process.

Consider impacts to wildlife from increased fragmentation of the forest stand. Creation of openings can benefit some wildlife species (e.g., early successional and edge species) yet be detrimental to others (e.g., forest interior species). Trails and landings, particularly after usage, may be utilized and managed for wildlife food and cover plantings. Favor native species for revegetating trails and landings. Refer to appropriate criteria in wildlife habitat practice standards, (e.g., NRCS CPSs Upland Wildlife Habitat Management (Code 645), and Early Successional Habitat Development/Management (Code 647)), as needed.

Trails typically connect to an existing road. Trails and landings no longer needed may be decommissioned.

Properly located trails and landings of sufficient width and location may be utilized and managed as firebreaks. See criteria in NRCS CPS Firebreak (Code 394) for additional guidance.

PLANS AND SPECIFICATIONS

Prepare specifications for applying this practice for each site including length, width, slope, final surface condition, and erosion control measures. Record using approved:

- Specification sheets.
- Hydrologic and hydraulic calculations, if necessary.
- Plan map.
- Implementation requirements.
- Narrative statements in the conservation plan, or other acceptable documentation.

OPERATION AND MAINTENANCE

Prepare an operation and maintenance plan for this site. As a minimum, include the following activities:

- Regularly inspect trails and landings to identify and address adverse effects associated with drainage and erosion control management measures. Maintain and restore, as necessary.
- Stabilize trails and landings intended or anticipated for management activities in subsequent years by establishing vegetative cover, removing structures (e.g., culverts), and adding water diversion (e.g., waterbars) according to state best management practices.
- Properly maintain trails and landings utilized and managed as firebreaks to accomplish this purpose while maintaining acceptable mitigation of other concerns.
- Access to trails and landings must be controlled when and where needed for erosion abatement, safety and liability, and reduced maintenance costs. Use CPS Access Control (PA472) as needed.
- Trails and landings no longer needed may be decommissioned. Use CPS Road/Trail/Landing Closure and Treatment (PA654).

REFERENCES

U.S. Department of Agriculture, Forest Service. 2012. National Best Management Practices for Water Quality Management on National Forest System Lands. FS-990A. Washington, DC. 177 p.

USDA, Forest Service-Northern Research Station, Web-Based Forest Management Guides. https://www.nrs.fs.fed.us/fmg/nfmg/fm101/bmp/index.html.

Yuri Plowden, State Soil Scientist, was introduced and defined a PxRF (Portable X-Ray Fluorescence), which is a non-destructive analytical technique used to determine the elemental composition of materials by measuring the characteristic X-rays emitted from a sample when it is exposed to X-ray radiation. (See attached hand-out) She showed examples of the PxRF being used in the field as well. Yuri listed resource concerns in urban soil, which include: soil temperature, compaction, and low organic matter. Yuri summarized what they have done so far with the PxRF and urban soils. They visited 17 sites with locations including: athletic fields, churches, and school yards. In visiting all these sites, they have found that the lead levels are elevated with respect to natural soil levels. Yuri reports that vacant lots tend to have higher lead levels, and lands close to streets also see higher lead levels. Yuri showed reports that are given to landowners showing where metals are at high levels and are at low levels.

USDA

United States Department of Agriculture

Soils Update Technical Soil Services with pXRF

PA NRCS State Technical Committee
Meeting July 24, 2024
Yuri Plowden, State Soil Scientist

Natural Resources Conservation Service

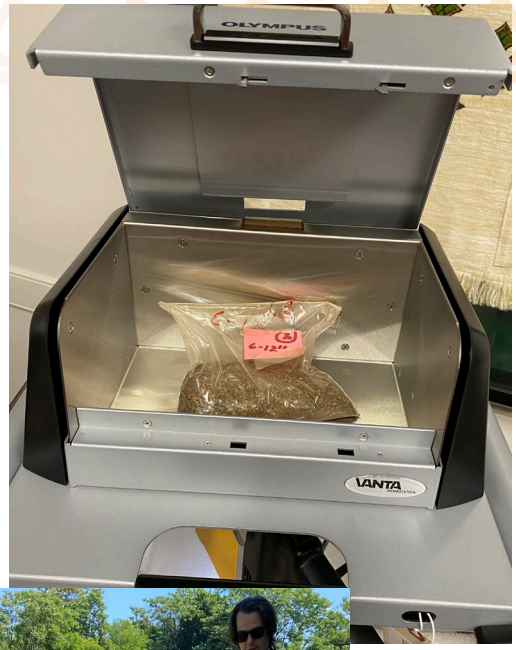
pXRF – portable X-Ray Fluorescence

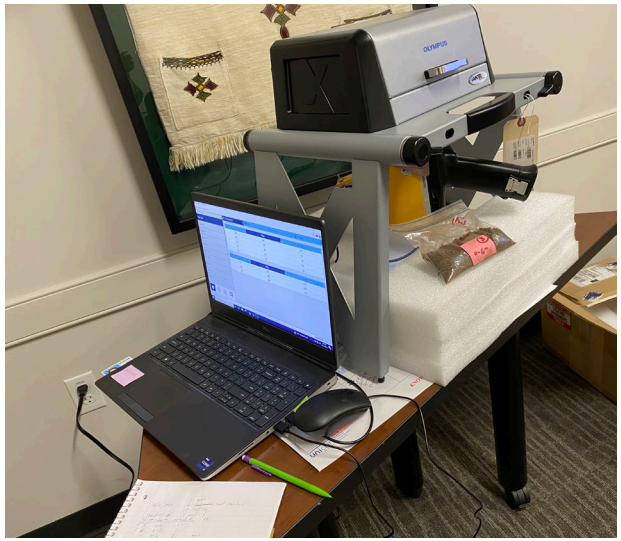
Natural Resources Conservation Service

Portable Tool Kit Test

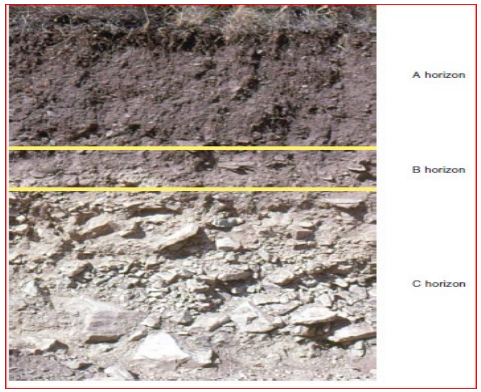
PXRF Data Collection

PX-ray fluorescence is an analytical technique that returns information about the elemental composition of a sample. The sample is illuminated with an X-ray beam and the atoms which are struck by the beam emit X-rays in response, usually at several different energies. Different elements produce different distributions of emitted X-rays so the spectrum of emitted X-rays can be used to identify which elements are present in a sample.

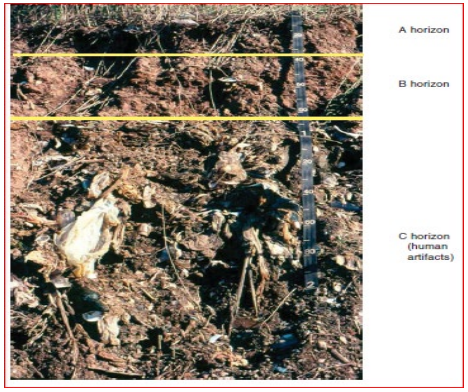




Resource Concerns in Urban Soils

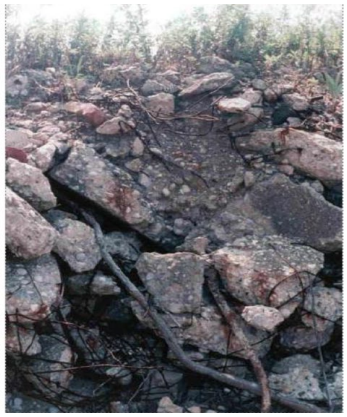


Natural Soil Profile

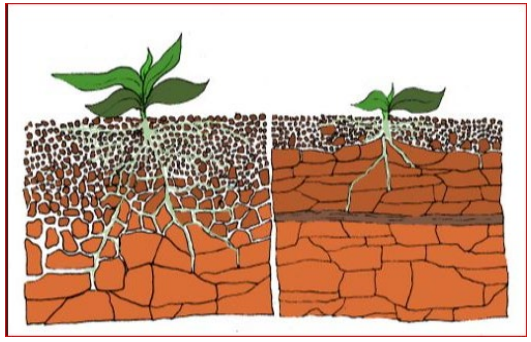


Urban Soil Profile

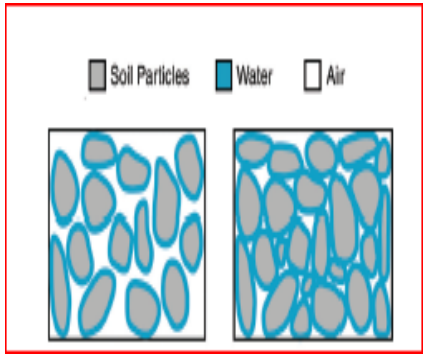
Coal ash



Construction Debris



Natural Soil **Urban Soil**



Noncompacted
Compacted

- Soil temp. higher in Urban Soils
- Compaction
- Low organic matter
- Water supply limited
- Heat stress in plant roots due to dry soils
- Less microbial activity
- More runoff
- Contamination

Natural Resources Conservation Service

URBAN FARM SITES

1. Identifying Problem Sites - Heavy Metal Resource Concerns

- Metals in soils come from various sources.
- Geology, or atmospheric additions of copper, mercury, lead, and zinc.
- Metals also may have been deposited by past industrial activities, such as battery production, brass and steel manufacturing, mining, and many different processes involving nickel, cadmium, copper, and lead. Use of pressure-treated lumber that had Cr and As.
- Lead is especially evident near roadways because of automobile emissions before the availability of unleaded gasoline.

pXRF Technical Soil Investigations

2023 to 2024

17 sites

Philadelphia

Delaware County

Dauphin County

Lancaster County

Berks County

Type of sites

Urban yards

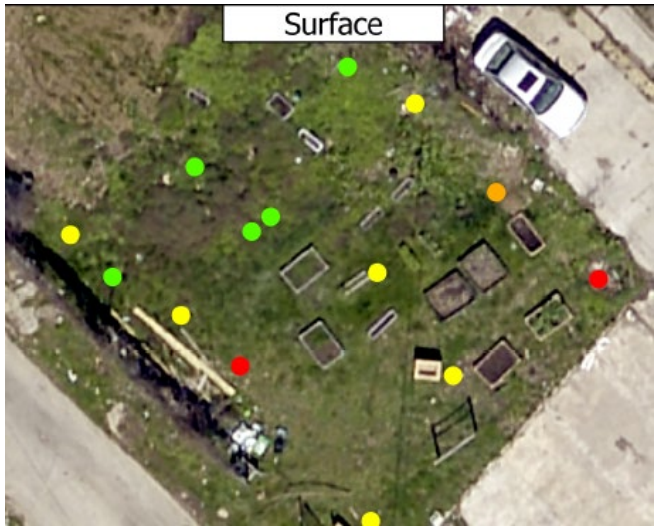
Community gardens

Church yards

Parks/playgrounds

Vacant lots that used to have houses or buildings

School athletic Fields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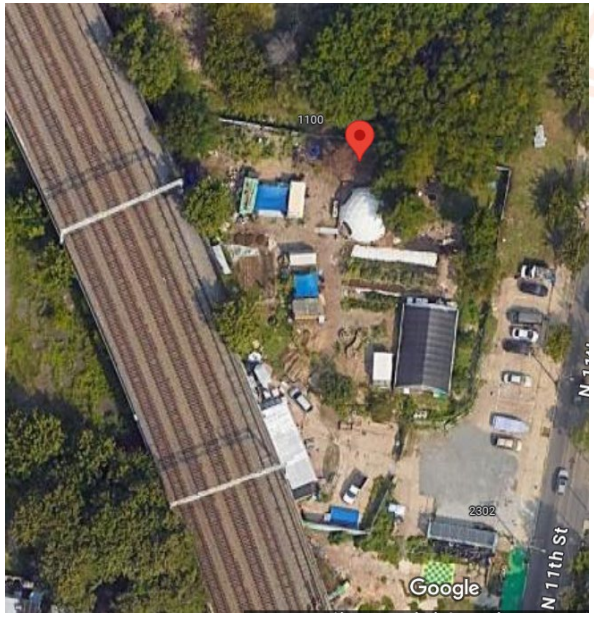
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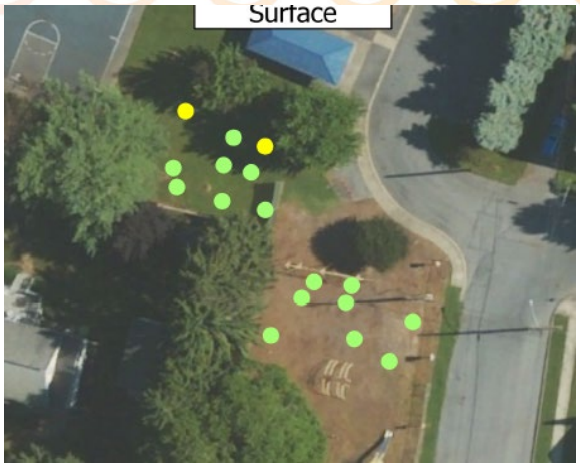

Surface

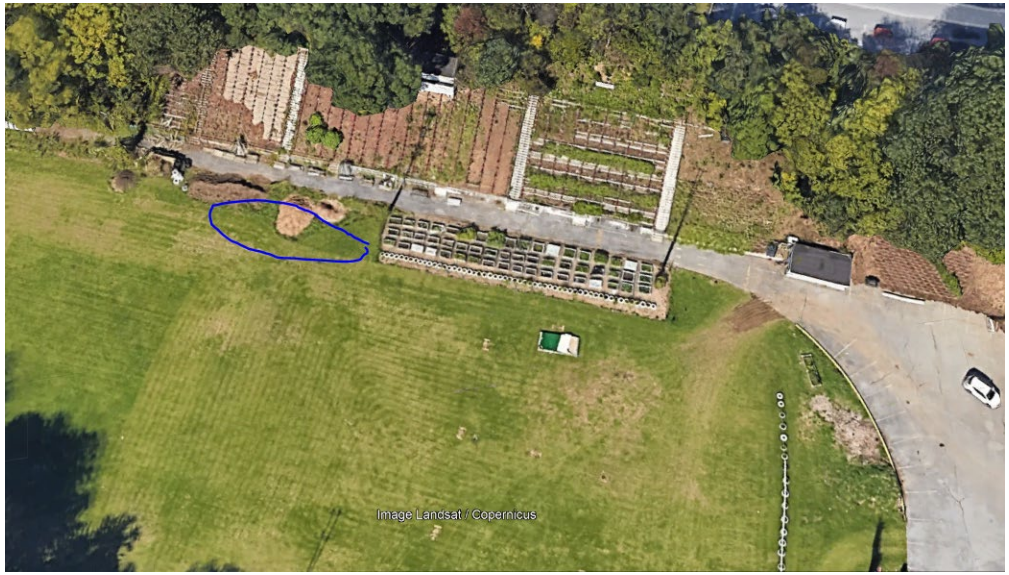


Image Landsat / Copernicus


Subsurface

Findings

In nearly all urban sites, lead is elevated with respect to natural soil background levels. Avg background non-urban soil Pb level in PA is 24ppm

Pb levels across all sites ranged from a minimum of 6ppm to 2909ppm.

Average across all sites was 277ppm

How much lead is too much?

- **No standards set specifically for urban gardening, so we provide the soil health standards based on desired thresholds for remediating brownfield sites for residential purposes.**

These vary too:

- **PADEP Pb Statewide Health Standard for brownfield remediation is 500ppm**
- **NJDEP Soil Remediation Standard is 400ppm**
- **EPA recent (as of 2024) superfund remediation standard for Pb is 200ppm. Previous screening level was 400ppm**

Pb is very problematic because it stays in the body and is harmful to young children. And it is ubiquitous.

Table 1. Interpretation of Estimated Total Lead in

Estimated Total Lead mg/kg (ppm)	Suggested Action
100 or less, low	Soil lead is within typical background levels. No precautions are necessary.
101 - 299	Soil lead levels are elevated relative to background levels. Follow best management practices for garden soils containing lead (see Table 2). It is suggested that blood lead levels of children 6 and under be tested.
300 - 400	Soil lead levels suggest significant contamination. Do not grow green leafy vegetables or root crops. Follow best management practices for garden soils containing lead (see Table 2). Further more conclusive testing is recommended.* It is recommended that blood lead levels of children 6 and under be tested and children should not play in areas of bare soil.
> 400	Soil lead levels are above the EPA level of concern. This soil should not be used for growing food plants. Children should not play in this soil. It is strongly recommended that blood lead levels of children 6 and under be tested. Further more conclusive testing is recommended.*

University of CT Lead interpretation fact sheet

Findings continued

Higher the disturbance, for example vacant lots that once had houses had elevated Pb especially where urban artifacts were found

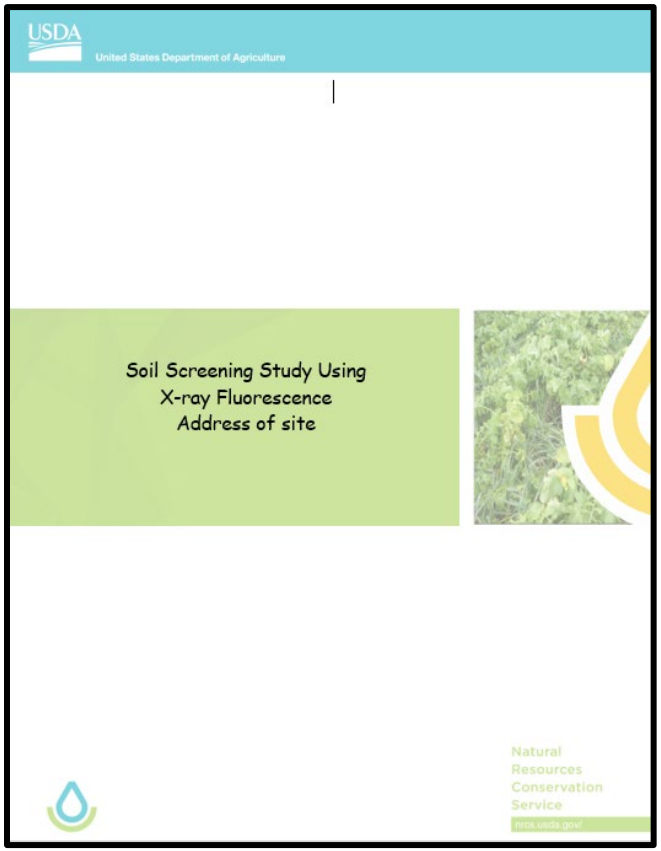
School athletic fields and areas that had been public parks had only slightly elevated levels of Pb

Where plenty of compost and organic amendments had been added, Pb levels were often <100ppm

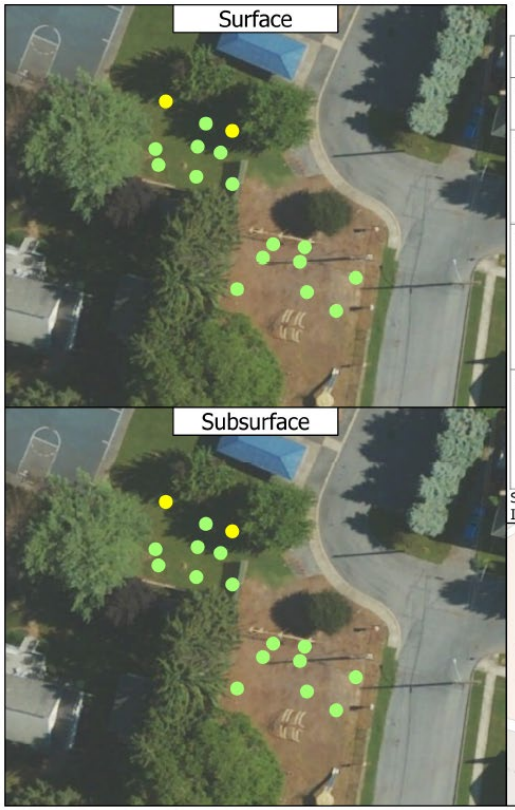
Observations made closest to buildings and streets typically had higher Pb.

Arsenic and Chromium levels also elevated in many cases.

Typical Report



Disclaimer:
Field based pXRF screening is not as accurate as laboratory analysis and is not designed to identify sources of contamination. This information may be interpreted by organizations, agencies, units of government, or others based on needs; however, they are responsible for the appropriate application. Federal, State, or local regulatory bodies are not to reassign to the Natural Resources Conservation Service any authority for the decisions that they make. The Natural Resources Conservation Service will not perform any evaluations of these data for purposes related solely to State or local regulatory programs.



X-Ray Fluorescence Lead Concentration Screening

Estimated Total Lead mg/kg (ppm)	Suggested Action
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Source: University of Connecticut Soil Lead Interpretation Sheet (attached)

Site: East End Park
Address: South 4th St. & P St.
City: Steelton
State: Pennsylvania
Measurement Date: 8/18/2023

This data set is not designed for use as a primary regulatory tool in permitting or citing decisions, but may be used as a reference source. This information may be interpreted by organizations, agencies, units of government, or others based on needs; however, they are responsible for the appropriate application. Federal, State, or local regulatory bodies are not to reassign to the Natural Resources Conservation Service any authority for the decisions that they make. The Natural Resources Conservation Service will not perform any evaluations of these maps for purposes related solely to State or local regulatory programs.

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ion

Customers get a data table with each reading and comparisons with health standards for NJ, EPA, and avg natural soil levels.

				Vanadium	Chromium	Nickel	Copper	Zinc	Arsenic	Cadmium	Lead
DEPTH Inch	Reading#	Date	Time	V	Cr	Ni	Cu	Zn	As	Cd	Pb
0 to 6	18	6/20/2024	9:46:33	<LOD	73	79	113	601	<LOD	<LOD	854
6 to 12	19	6/20/2024	9:47:30	161	83	96	159	695	71	<LOD	1778
0 to 6	20	6/20/2024	9:48:52	<LOD	<LOD	41	61	165	16	<LOD	67
6 to 12	21	6/20/2024	9:49:48	<LOD	64	47	69	223	16	<LOD	251
bare surface	22	6/20/2024	9:51:13	<LOD	<LOD	68	74	218	13	<LOD	165
ushroom compo	23	6/20/2024	9:53:19	<LOD	<LOD	<LOD	361	393	<LOD	<LOD	8
ushroom compo	24	6/20/2024	9:54:58	<LOD	<LOD	<LOD	426	446	<LOD	<LOD	<LOD
topsoil	25	6/20/2024	10:00:28	<LOD	<LOD	37	110	198	8	<LOD	29
topsoil	26	6/20/2024	10:01:31	<LOD	<LOD	45	128	215	17	<LOD	30
			AVERAGE	161.0	84.1	55.8	119.5	328.7	27.3	<LOD	547.2
PADEP Statewide Health Standards for Soil for regulated substances				*1100	37	4400	7200	66000	12	110	500
Residential Direct Contact Health Based Criteria. These medium-specific concentrations (MSC)s are desired thresholds for the PA Land Recycling Program for Residential use, but there are no MSCs specifically for urban gardening. Cr MSC is for Chromium VI which is the oxidized state and toxic to human health. Vanta measures total Cr including Cr III which is an essential trace element but chronic exposure may be harmful. New MSC standards for Vanadium in soil updated in 2023 and increased from 15ppm to 1100ppm											
NJDEP Soil Remediation Standards Residential Direct Contact Health Based Criteria *The Soil Remediation Standard for Arsenic is based on natural background levels in soil.						1600	3100	23000	19*	78	400
Mean Values, PA Soils, total elemental analysis				53		26	37	81	13		24
Boerngen and Shacklette - 1981, Chemical analysis of soils and other surficial materials of the conterminous United States. USGS Open-File Report 81-197,											
EPA 2024 Updated Soil Lead level Screening Guidance for CERCLA Sites and RCRA Corrective Action											200

Values highlighted in red are above the PADEP Statewide Health Standards for the PA Land Recycling Program for residential use.

Values highlighted in brown are above the EPA updated soil lead screening level of 200ppm.

<LOD means that the level of the element is below the Limit of Detection for the pXRF machine. For calculating the average, <LOD will be considered 0.

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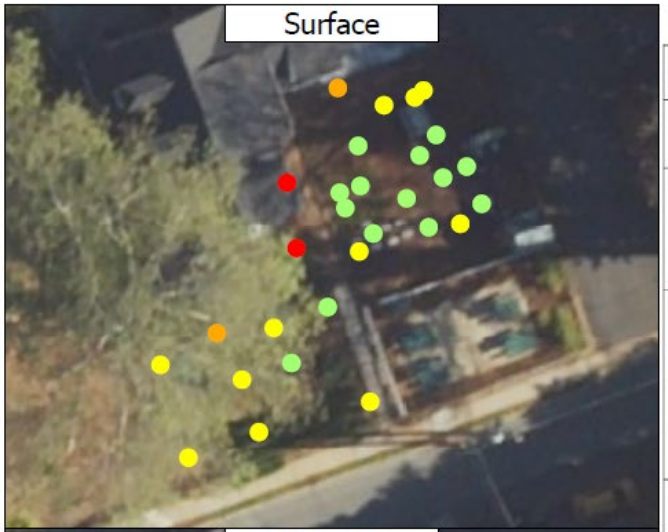
Example Urban site – Delaware Co. elevated Pb levels, some >400ppm. Yellow and red dots show areas of concern particularly in the subsoil



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Source: University of Connecticut Soil Lead Interpretation Sheet (attached)

Site: [redacted]
Address: [redacted]
City: [redacted]
State: Pennsylvania
Measurement Date: 4/26/2023

This data set is not designed for use as a primary regulatory tool in permitting or citing decisions, but may be used as a reference source. This information may be interpreted by organizations, agencies, units of government, or others based on needs; however, they are responsible for the appropriate application. Federal, State, or local regulatory bodies are not to reassign to the Natural Resources Conservation Service any authority for the decisions that they make. The Natural Resources Conservation Service will not perform any evaluations of these maps for purposes related solely to State or local regulatory programs.

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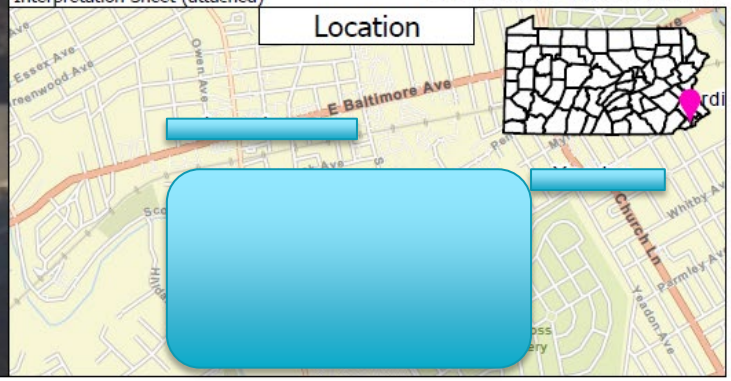

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Site when pXRF data was collected. Some vegetables were being grown in the ground with elevated Pb in the subsoil (6 to 12”)

Site after NRCS worked with the customer. All raised beds. Lots of food can be grown here safely.

NRCS works as a team with urban farmers

pXRF investigations are part of the NRCS conservation planning process

Please work with your local field office first.

Step 1: Identify Problems and Opportunities. ...
Ste 2 : Determine Objectives.
Step 3: Inventory Resources.
Step 4: Analyze Resource Data.
Step 5: Formulate Alternative.
Step 6: Evaluate Alternatives.
Step 7: Make Decisions.
Step 8: Implement the Plan.

For more information, contact: Yuri Plowden, NRCS State Soil Scientist, Harrisburg, PA
yuri.plowden@usda.gov

Natural Resources Conservation Service

Susan Parry, PA NRCS Assistant State Conservationist for Programs, was introduced and went over updates on the Philadelphia Urban Growers Association, which reached 100 growers with TA. (See attached hand-out) Explained that there is ongoing support from leaders in Philadelphia to open a district conservationist office. Susan said that they are working on opening a Pittsburgh office and have collaborated closely with FSA and Allegheny County Conservation District Partners. NRCS Outreach Coordinator was hired and will have a start date of August 26, 2024. FSA beginning farmer POC was hired. She followed this up with a overview of partnerships statewide and technical. Outreach grants and agreements partnerships include Pennsylvania Association of Sustainable Agriculture (PASA), PA Friends of Agriculture/ PA Veteran Farming Project, Korean Americans Farmers Association (KAFA). NRCS Technical Agreements include U.S. Fish and Wildlife Service (USFWS), WRE Stewardship Technical Assistance, VPA-HIP PA F&B Commission.

Partnership/Outreach Updates:

- Philadelphia Urban Service Center (USC) reached over 100 growers with TA, worked on eligibility and ID potential barriers to USDA FA Programs.
- Collaboration with PDA, SCC and local contacts to support CD office in Philadelphia county.
- Pittsburgh (USC) on track; Close coordination with FSA and Allegheny County CD partners.
- NRCS State Outreach Coordinator Hired, will begin August 26, 2024; FSA Beginning Farmer POC hired.
  - Abigail Appleman will be based in Centre County (Mill Hall FO).
  - Statewide Responsibilities- Internal and External Outreach Roles.
  - Analyze both staff and customer data to target efforts.

Partnership/Outreach Updates:

-
- Covers national priorities, CR Title VI and Title VII activities.
- Targeted outreach and partners, staff recruitment and retention, with performance logged quarterly (State Outreach Coordinator).
- For reporting purposes, we use Survey 123 Tool and Dashboard (designed/implemented in 2020).

USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

Natural Resources Conservation Service
Pennsylvania

Outreach, Equity, and Communication Plan

PURPOSE

The purpose of this document is to identify outreach goals, objectives, and actions pertaining to new initiatives, programs, and policies to keep agriculture productive, viable, and sustainable for all sectors of farming. This includes rural, urban, suburban agriculture, community supported agriculture, conventional, organic, animal and crop production agriculture, alternative crops, equine, aquaculture, forestry, and more. This document serves as the state of Pennsylvania's guidance and record of providing farmers, growers, producers, and landowners with the necessary tools, resources, and educational opportunities critical to their continued long-term success.

NRCS NATIONAL PRIORITIES

- Advancing Equity, Justice, and Equal Opportunity
- Addressing Climate Change
- Supporting Urban Agriculture and Innovative Production
- Cultivating a Diverse, Well-Trained Workforce
- Building Partnerships

TARGET AUDIENCES

Outreach is extended to everyone, but based on USDA Leadership, State Conservationist, and Civil Rights objectives, priority is given to:

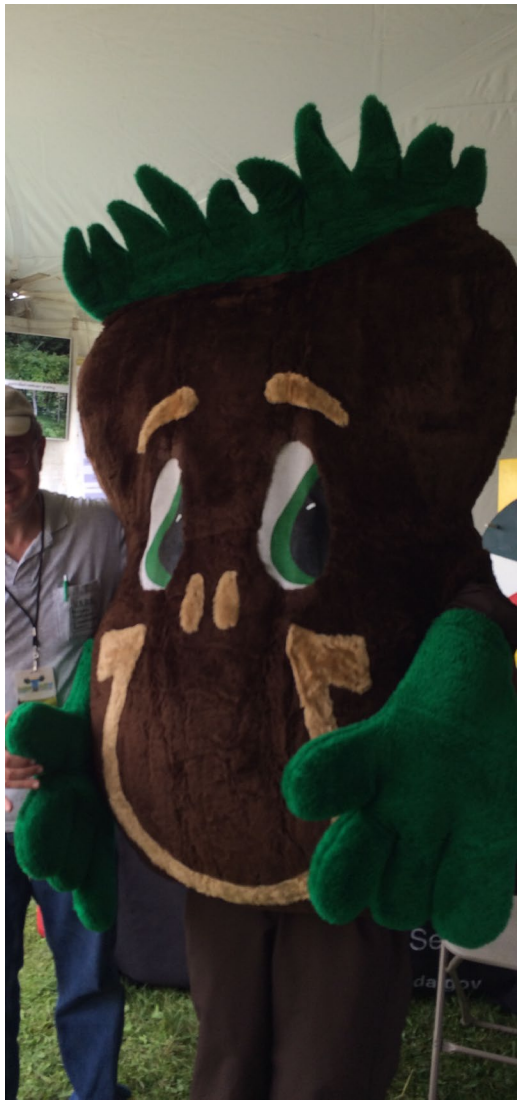
Primary Audience – Customers & potential customers

- Farmers and Forest Landowners
- Beginning Farmers
- Limited Resource Farmers
- Socially Disadvantaged Farmers
- Organic Farmers
- Urban/Smale-Scale Farmers and Growers
- Special Emphasis farmers:
  - Tribal Government and Native American Farmers/ Landowners
  - Native Hawaiian and Pacific Islander Farmers
  - Southeast Asian immigrant farmers
  - African Immigrant and Black Farmers
  - Disabled Farmers
  - Hispanic Farmers
  - LGBTQIA+ Farmers
  - Veteran Farmers
  - Women Farmers
  - Non-operator Landowners

April 2024 *Helping People Help the Land* Pennsylvania

Statewide Partnership Updates:

- Outreach Grants and Agreements (statewide)
  - Pennsylvania Association for Sustainable Agriculture (PASA)- indigenous (HU) farmer outreach and technical assistance (climate-smart practices)
  - PA Friends of Agriculture/PA Veteran Farming Project- veteran and beginning farmer training and mentoring
  - Korean American Farmers Association (KAFA)- AANHPI outreach, farm enrollment and training
- Technical Agreements (statewide)
  - USFWS- Bog and Other threatened Turtle species
  - WRE Stewardship Technical Assistance
  - VPA-HIP PA F&B Commission- Fishing Access



Dimka Braswell, Facilitation Cohort for Philadelphia Food Advisory Council, was introduced and announced that next public meeting is August 25th, 2024. (See attached hand-out) Dimka told the group that the food advisory council are interviewing other groups in New York and Atlanta about conservation district planning and community support. Encouraged people to sign up for their newsletter. Dimka laid out how the chief came to Philadelphia to support everyone and appreciated the support that NRCS, and the community had given during the visit. Dimka hoped that now that the service center is in Philadelphia it will help farmers with policy changes.

PHILADELPHIA FOOD POLICY ADVISORY COUNCIL

The Food Policy Advisory Council (FPAC) is made up of 34 Appointed Members from across the food system who advise the Mayor and local government to create a more just food system. We at FPAC envision a food system where all people in Philadelphia have the power and resources to access and control our food, land, and labor.

Today, that is not the reality. White supremacy, anti-Black racism, and interlocking forms of oppression form barriers to our vision. These barriers impede the movement of food from land and sea to the people.

FPAC's work is to use policy to address these barriers and shift power. We center the wisdom and build the political influence of Philadelphians most impacted by exploitation and injustice–Black, Brown, Indigenous, poor, and marginalized people. FPAC aims to be led by and work with these communities to identify and remove the barriers in our food system and to empower the people of Philadelphia to control our food, land, and labor.

Get Involved

https://phillyfpac.org/ Next public meeting: 8/25/24 2-3pm

CITY OF PHILDELPHIA'S

FOOD POLICY ADVISORY COUNCIL ACCEPTING MEMBER NOMINATIONS!

The Philadelphia Food Policy Advisory Council has been closed to the public since the COVID-19 Pandemic of 2020 and aims to re-emerge into the public in June 2023. With multiple ways to engage with FPAC, learn more on how to join us today!

Join FPAC's General Session

The full body of FPAC meets six times per year at General Meetings to coordinate and affect transformative structural change that gets to the roots of people not having the power and resources to access and control our food, land and labor. The **next FPAC General Meeting is open to public**. Register below to join us:

Date: August 25th, 2024
Time: 2:00pm to 4:00pm
Location: Registration Link

Become an FPAC Member

FPAC has multiple ways to join! We are seeking members who share our vision for a more just food system and aim to build coalition with food-connected organizations throughout the region to participate. We are not currently accepting appointed member nominations, but you can nominate yourself, or someone you know, for future FPAC consideration using our form below:

FPAC's Member Nomination Form

Stay Updated on FPAC News

Stay updated on FPAC by following us on social media and signing up for FPAC's mailing list! We will be launching Working Groups centered around food justice to advance our work, and we want you to join! Sign up now to learn more about how to get involved and stay connected with FPAC's work:

https://whyy.org/articles/philadelphia-community-gardens-steward-security-law/?utm_campaign=sproutsocial&utm_content=1721219235&utm_medium=post&utm_source=twitter&fbclid=IwZXh0bgNhZW0CMTEAAR1Da9VNeJrUy2OKN9qK6p2wWddmZDsQ_QCyLZgoCFOCE_HyJj5TsWpBcqk_aem_DG8wgtiLNe_Zei8OpIve3A

3 things to know about the new Pa. law that could help Philly gardeners own the land they steward

The law lowers the bar for “adverse possession.” It’s part of recent moves to improve garden land security.

- By Sophia Schmidt
  July 17, 2024

Visit from NRCS Chief, 7/9/24:

https://www.inquirer.com/news/philadelphia/terry-cosby-urban-agriculture-climate-social-issues-20240711.html?fbclid=IwZXh0bgNhZW0CMTEAAR2JKfrs2ZvuQPrFBNYt4ymqpsVomrifQBUYO1bewYivapqER3f4MLU5YSE_aem_j6JaYSTefrhqB4HQcSOMsA

NEWS > PHILADELPHIA

Are Philadelphia farmers the key to making the city a cleaner and healthier place to live?

Federal agency is pushing urban agriculture as a climate change and social issues solution.

Terry Cosby, chief of Natural Resources Conservation Service, poses for a portrait at the National Leadership Meeting at Sofitel in Philadelphia, Pa., on Tuesday, July 9, 2024.
Tyger Williams / Staff Photographer

by Lynette Hazelton
Published July 11, 2024, 10:27 a.m. ET

Equity Forum at Sankofa Farms 7/18/24:

https://www.canva.com/design/DAGKvtZbeGU/SDdP4-P7dLeb5wvozhpXbQ/view?utm_content=DAGKvtZbeGU&utm_campaign=designshare&utm_medium=link&utm_source=viewer

National NRCS Leaders Meet in Philadelphia

During the week of July 8th, NRCS Chief Cosby, Regional Conservationists (RCs), and State Conservationists from around the country met for the National Leadership Team Meeting in Philadelphia. This year's theme was "Advancing Conservation Stewardship: Challenging our Leaders to Expand Program Delivery." The meeting opened on Tuesday with a welcome from Robert Bonnie, USDA Undersecretary for Farm Production and Conservation and Chief Cosby, followed by remarks from Kasey Taylor (NE RC), and State Conservationist Denise Coleman, who highlighted the common agricultural features of Pennsylvania.

After a State of the States forum, an urban agriculture panel took place with several local growers, including Carolyn C. Cavaness, Pastor of Bethel AME Church of Ardmore; Dimka Braswell, Owner R and B Farms; Dr. Jamie Green, PA Dept. of Ag, eastern PA director; and Kim Jordan, Co-Director, Philadelphia Orchard Project. There was a Question-and-Answer session with the panelists in which they discussed their experiences with urban agriculture, barriers faced, and support from the USDA Urban Service Center through the People's Garden Initiative and EQIP.

After the Urban Ag Panel discussion, Chief Cosby sat down with the panelists and a reporter from the Philadelphia Inquirer and was interviewed for a news article that can be read here.

Wednesday and Thursday consisted of breakout sessions on topics such as: Building Partnerships- New Customers and Outreach, Building Inclusive Partnerships through RCPP, EPD Easements Process Improvements, FY 2025 Essential Training, Incorporating Human Capital Planning, Get to Know Your MLRA, Strategic Performance Management, and Using Outreach Coordinators.

The meeting concluded on Thursday afternoon with a closing by Chief Cosby.

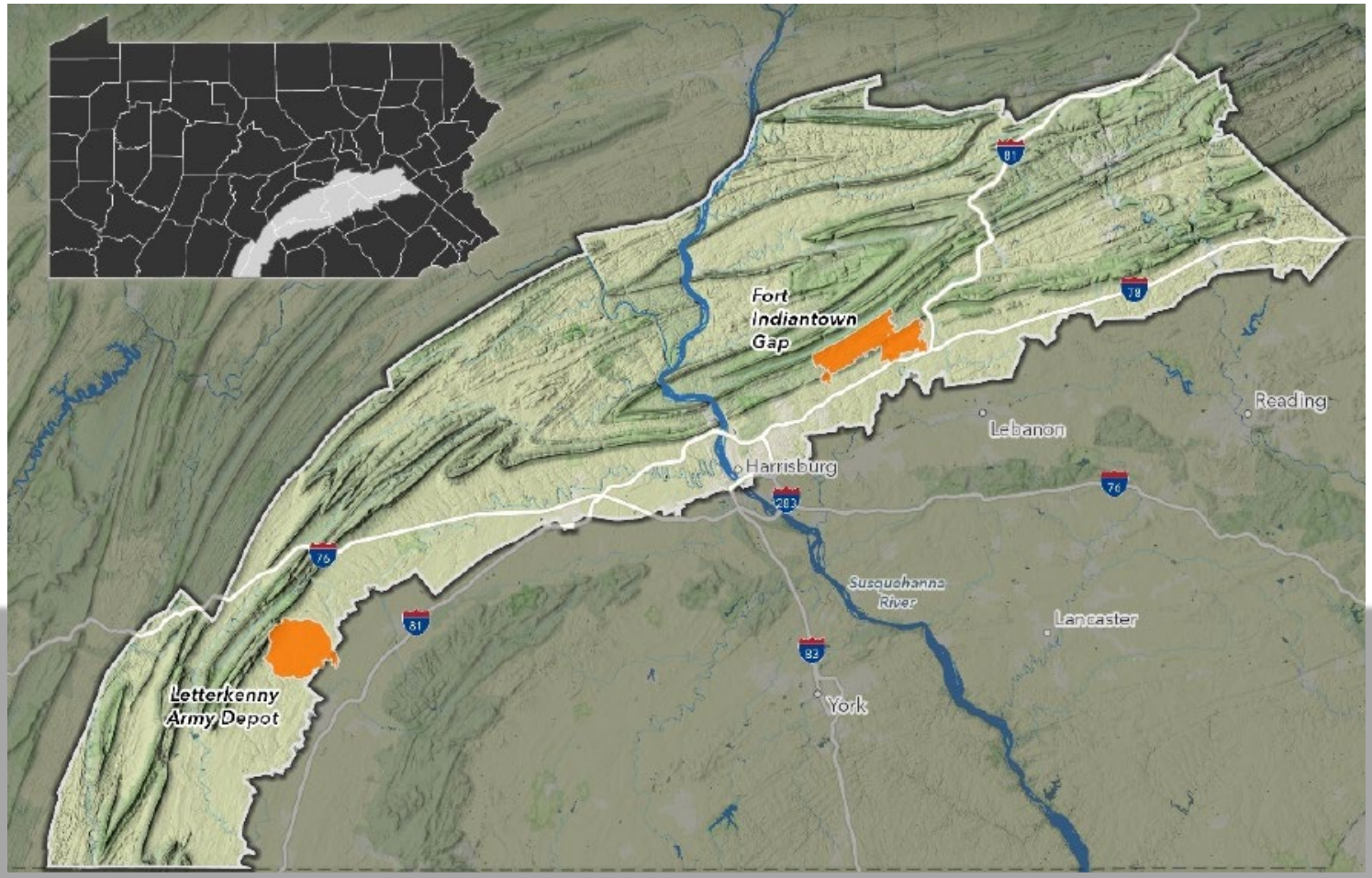
Sheriff sales resume: this image is how gardeners and Micro-Farmers in Philly found out that the sheriff sales would be resuming and what their recourse was.

Kristen Hand, DCNR Internal Lead for Kittatinny Ridge Conservation Landscape was introduced and announced that they were designated 5 sentinel landscapes from the Kittatinny Ridge. Sentinel landscapes are a partnership between military installations and conservation practices. 50 different federal, state, local, and private entity partners were involved in securing the landscape.

<u>Melissa Hanner, Easements Program Manager,</u> was introduced and went over what the team will be finishing in the fiscal year. (See attached hand-out) For the ACEP-ALE applications, they had 7 applications that they will be wrapping up the process for. They saw three WRE applications, which is exciting since they have not done contracts for them since 2020. Melissa introduced the Kittatinny Ridge Corridor Project, which saw $7,000,000 USDA allocations. Easement team is 98% complete for easement monitoring.

KITTATINNY RIDGE

Kittatinny Ridge Sentinel Landscape



Kittatinny Ridge Sentinel Landscape

Kittatinny Ridge received the national designation of *Sentinel Landscape* on May 14, 2024

The 2024 Sentinel Landscapes include:

Eastern New Mexico Sentinel Landscape, New Mexico
Great Salt Lake Sentinel Landscape, Utah
Hawai‘i Sentinel Landscape, Kaua‘i, O‘ahu, and Hawai‘i Island
Kittatinny Ridge Sentinel Landscape, Pennsylvania
Mojave Desert Sentinel Landscape, California

Kittatinny Ridge is one of 18 designated Sentinel Landscapes in the nation.

Sentinel Landscape Partnership

Sentinel Landscape Partnership

- Founded in 2013 by the U.S. Department of Agriculture (USDA), Department of Defense (DOD), and Department of the Interior (DOI)

Mission

- Strengthen military readiness
- Conserve natural resources
- Bolster agricultural and forestry economies
- Increase public access to outdoor recreation
- Enhance resilience to climate change



Kittatinny Ridge Sentinel Landscape

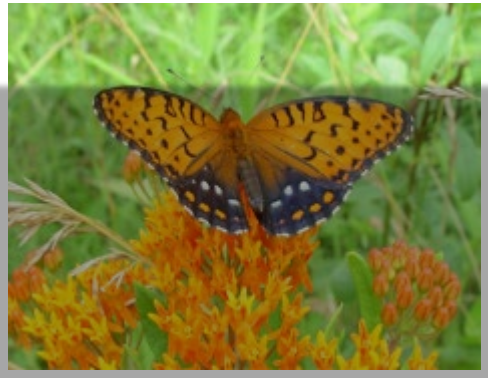
- **50 different federal, state, local, and private entities helped secure the designation.**
- **Federal, state, and local governments own about 17% of the landscape. Private landowners hold most of the land.**
- **The new Kittatinny Ridge Sentinel Landscape (KRSL) designation will assist in defining zoning and protecting land to the east, south, and west of Fort Indiantown Gap (FTIG).**

Kittatinny Ridge Sentinel Landscape (Established 2024)

Fort Indiantown Gap busiest training center in FY23

Photo By Staff Sgt. Jonathan Campbell | U.S. Soldiers with 1st Battalion,...

Regal Fritillary Butterfly at Fort Indiantown Gap



Fort Indiantown Gap facilitates Army Compatible User Buffer program land conservation action, largest in northeast

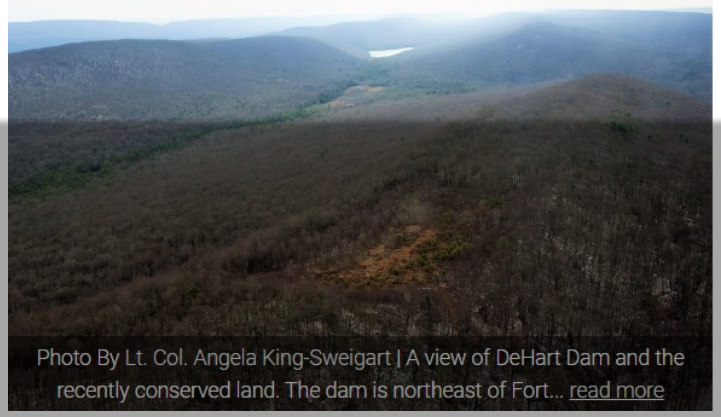
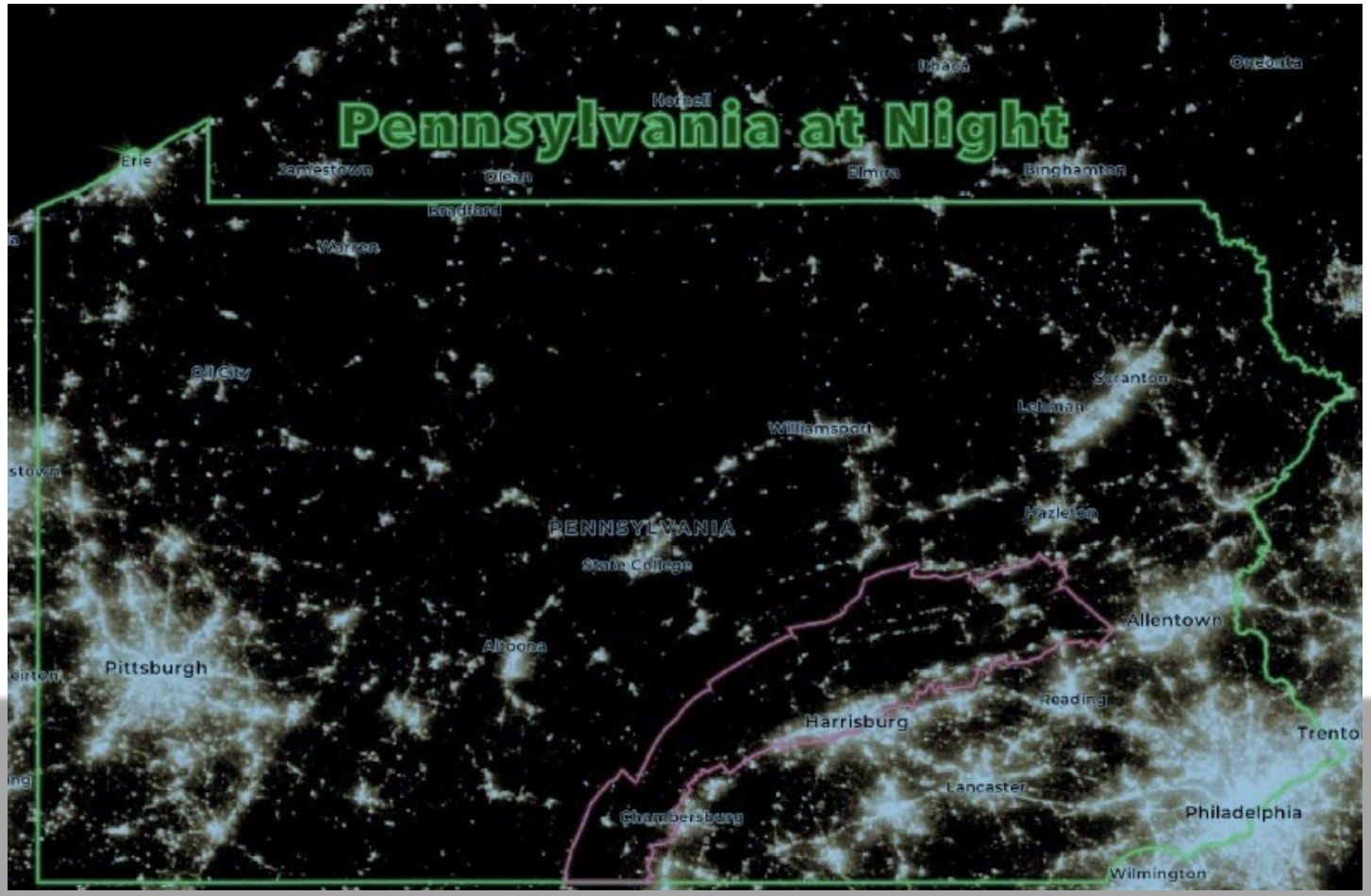


Photo By Lt. Col. Angela King-Sweigart | A view of DeHart Dam and the recently conserved land. The dam is northeast of Fort... read more

Kittatinny Ridge Sentinel Landscape (Established 2024)



Visit the KRSL Story Map Link below to learn more.

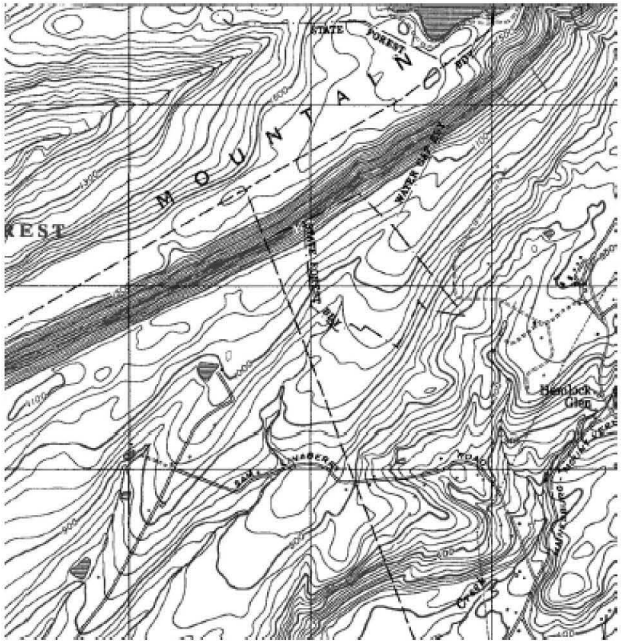
DCNR Interactive Map - Kittatinny Ridge Sentinel Landscape (arcgis.com)

Link to the Sentinel Landscape Partnership page

https://sentinellandscapes.org/landscapes/kittatinny-ridge/

Thank You for Your Time

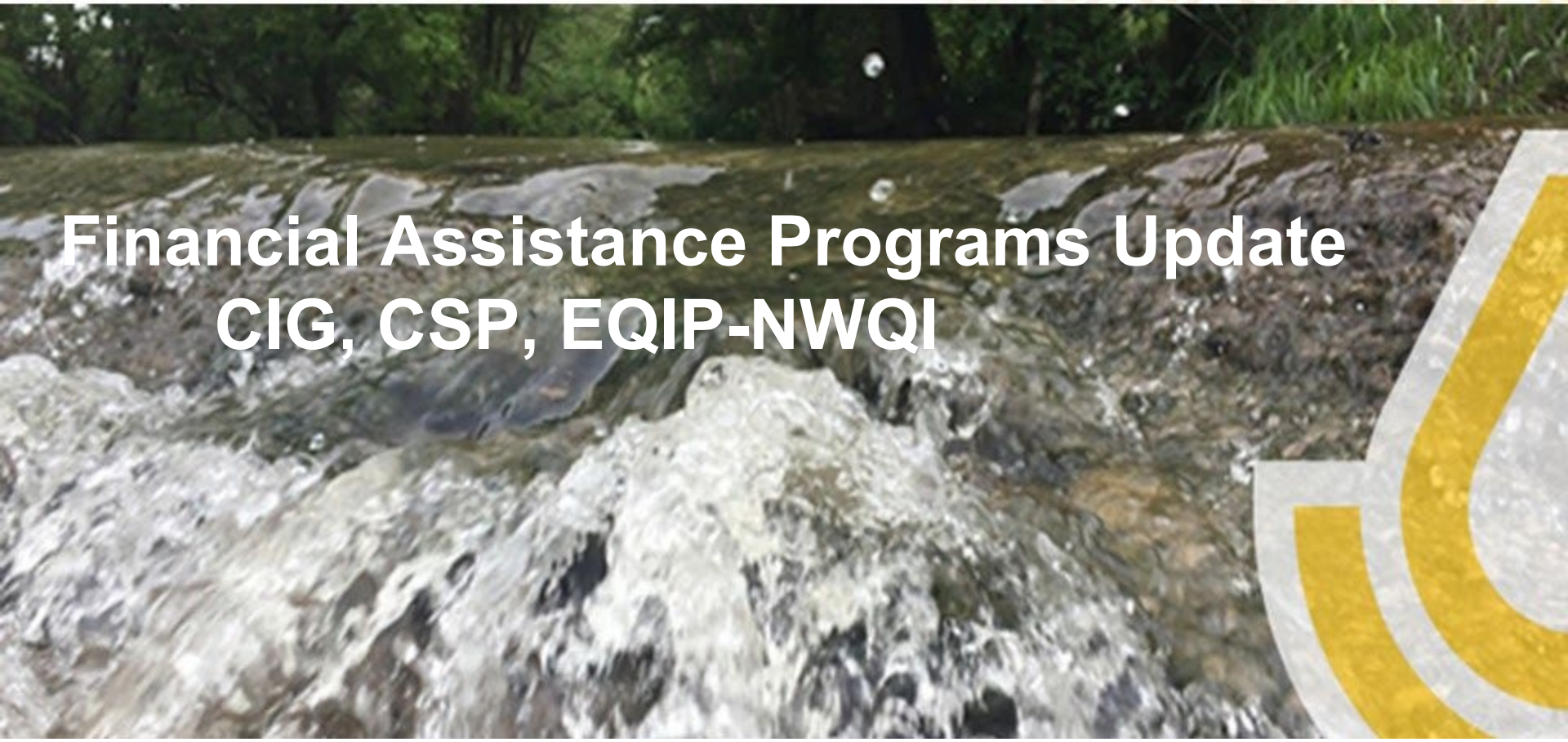
- **Kristen L. Hand**
  - DCNR Internal Lead for the Kittatinny Ridge Conservation Landscape
  - Khand@pa.gov



<u>Ashley Lenig, PA NRCS Conservation Program Manager for CSP, CIG, NWQI,</u> was introduced and is gave a update on behalf of Jared Shippey, the conservationist for programs. (See attached hand-out) Ashley explained how they were looking to wrap up Fiscal Year funding, with a large increase in funding for FY24. Ashley goes on to give an update from Ryan Cornelius, the Equality Quality Incentives Program Manager. She goes down the list of each EQIP program, and the money that was allocated, as well as the contracts obligated. She proceeded to go through the Agriculture Management Assistance (AMA) money that was allocated and the contracts obligated. Ashley explained how the Conservation Innovation Grants (CIG) state funding competition was announced on grants.gov in May. The application deadline will be July 31st. Conservation Stewardship Program (CSP) is next. The total CSP allocation is: $11,935,000. Ashley finished with mentioning the National Water Quality Initiative with a total allocation of $3,168,383. She explained that there could be potential changes as moving out of upper Yellow and Beaver creek and to add a fishing creek in Clinton County. Ashley said that requests are with the national office for review.

USDA
United States Department of Agriculture

PA NRCS Programs Team



Financial Assistance Programs Update
CIG, CSP, EQIP-NWQI

Pennsylvania State Technical Committee Meeting
Ashley Lenig, Conservation Program Manager

July 24, 2024

Natural Resources Conservation Service

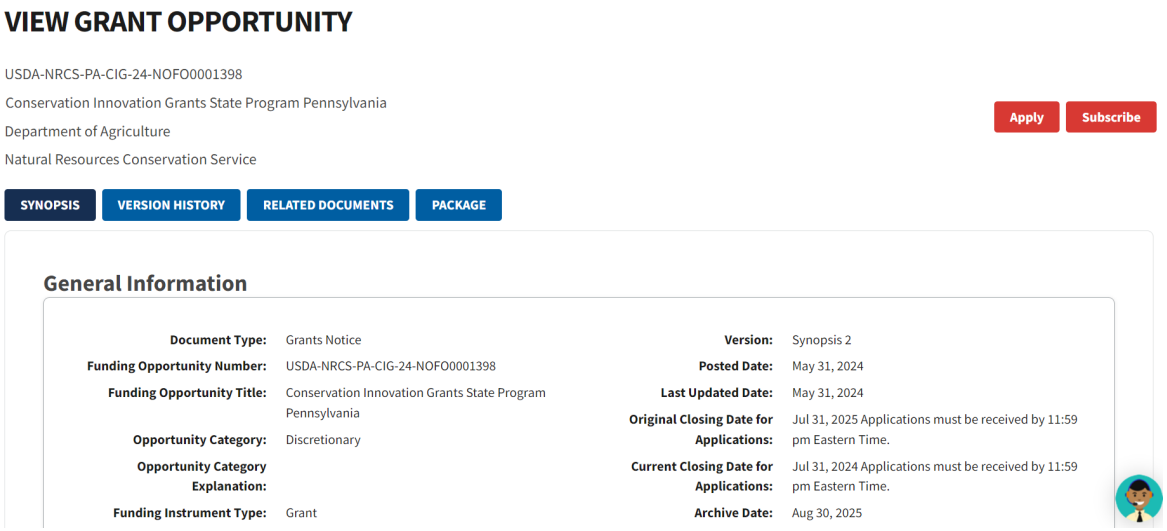
nrcs.usda.gov/

Presentation Outline

- Conservation Innovative Grants (CIG)
- Conservation Stewardship Program (CSP)
- National Water Quality Initiative (EQIP-NWQI)

Conservation Innovation Grants

- State competition Notice of Funding Opportunity was posted on Grants.gov on May 31.
- USDA-NRCS-PA-CIG-24-NOFO00001398
- A CIG Information / Q&A Session was held on June 12th.
- The application deadline is July 31st at 11:59pm.



VIEW GRANT OPPORTUNITY

USDA-NRCS-PA-CIG-24-NOFO0001398
Conservation Innovation Grants State Program Pennsylvania
Department of Agriculture
Natural Resources Conservation Service

Apply Subscribe

SYNOPSIS | VERSION HISTORY | RELATED DOCUMENTS | PACKAGE

General Information

Document Type:	Grants Notice	Version:	Synopsis 2
Funding Opportunity Number:	USDA-NRCS-PA-CIG-24-NOFO0001398	Posted Date:	May 31, 2024
Funding Opportunity Title:	Conservation Innovation Grants State Program Pennsylvania	Last Updated Date:	May 31, 2024
Opportunity Category:	Discretionary	Original Closing Date for Applications:	Jul 31, 2025 Applications must be received by 11:59 pm Eastern Time.
Opportunity Category Explanation:		Current Closing Date for Applications:	Jul 31, 2024 Applications must be received by 11:59 pm Eastern Time.
Funding Instrument Type:	Grant	Archive Date:	Aug 30, 2025

Conservation Stewardship Program

CSP (renewals and classic) in FY2024

- 304 contracts for $9,855,446 on 56,591 acres
- 83% of funds obligated; with approvals will be 86%
- 12 additional preapprovals were made last week.
- Total CSP FY24 Allocation: $11,935,000

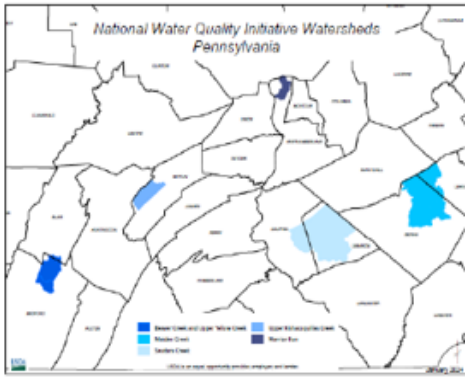
CSP Classic Allocation: $10,331,954 in funds
(General $7,145,717; IRA $3,186,237)

National Water Quality Initiative

Environmental Quality Incentives Program – NWQI

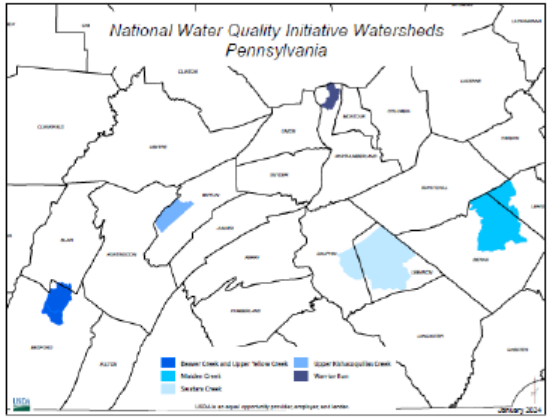
- FY2024 Allocation: $3,168,383
  - 19 applications were selected to fund
  - 14 contracts obligated for $2,346,354 on 2,673 ac.
  - Some drop-outs, no additional funds needed

- Potential NWQI changes (withdrawal / planning phase)
  - Moving out of Upper Yellow & Beaver Creek (2017)
  - Requested to add Fishing Creek in Clinton County
  - Requests are with national office for review



USDA
United States Department of Agriculture

National Water Quality Initiative



Pennsylvania

USDA United States Department of Agriculture

The National Water Quality Initiative (NWQI) targets agriculturally impaired watersheds and seeks to remove ag impairments through working with stakeholders in the watersheds to educate landowners and operators, provide technical assistance and funding through the Environmental Quality Incentives Program to fund environmental improvements on farms, and monitor water quality parameters to determine trends in Pennsylvania's waterways. Our state has five established watersheds (see map, left). Watershed Assessment Plans were written in 2019 and the implementation phase began in 2020. The sections below showcase the unique aspects and progress in each NWQI watershed towards environmental improvements and meeting their individual water quality goals. In addition to this effort, USDA – Natural Resources Conservation Service provides free technical assistance and opportunities for financial assistance through conservation programs in all counties in the state.


2023 Warrior Run Assessment Delineations (PA DEP)

Warrior Run Fish Habitat Improvement

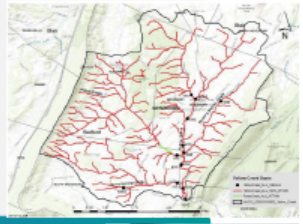

2019 Assessment Summary (PA DEP)

Warrior Run

- From 2020-2023, 14 plans, 9 contracts, $951,808 obligated, 1,323 acres.
- A unique feature of the NWQI effort in this small watershed was the many different outreach activities. Some of the highlights included: an informational Pancake Breakfast, Ice Cream by the Stream with electrofishing and macroinvertebrate collection (see picture, right), and the Free Tree Giveaway.
- Goals: 5 year: reduce sediment load by 9%; long term: reduce P by 25%
  DEP monitoring is now occurring 4x /yr. to show trends of reduction
- Progress: As of 2019, the upper reaches of the watershed were removed from the ag-impaired streams list. See map, top center.
- Fish habitat structures installed in partnership with USFWS. See photo, top, third from right.

Upper Yellow and Beaver Creek

- From 2020-2023, 11 contracts, $680,081 obligated, 1,255 acres.
- Unique aspect: efforts since 2017. In 2017-2019, 29 contracts, $1,401,617 on 3,345.6 acres.
- Goals:
  - Over 5 years, see a 3% reduction in nitrates and a 5% reduction in conductivity;
  - Over the long range (10-20 yrs.), we hope to see improvement across water chemistry parameters and macroinvertebrate IBIs.
  - N, P, and sediment runoff reduced by 7,500, 2,000, and 10,000 lbs/yr. as estimated by NRCS calculations.
  - 8,346 acres treated / 86,400 total watershed acres = 9.7% of the critical source areas.



Upper Kishacoquillas

- Since 2019, 8 contracts, $1,470,166; Since 2012, a total of 23 contracts, $3,336,831.
- Unique aspect: Amish farms comprise 66% of the 70% of the watershed that is in agricultural land.
- Goals: See map, top, second from right.
  - Reduce non-point source sediments by 20% to 20,000 lb./day and total phosphorus by 20% to 56 lb/day by 2025.
  - Nitrogen levels should be reduced to approximately 25,000-30,000 lb/ac/year over the next 5 years.
  - Implementation Goals: treat an additional 300 acres per year by CTA or FAP
- Progress:
  - While Total Nitrogen levels has stayed about the same (see chart, right),
  - Total Phosphorus and Total Suspended Solids decreased by 76% and 62% respectively.

Year	Total N mg/l	Total P mg/l	TSS mg/l
2013	12.12	0.34	135.21
2014	12.25	0.33	127.71
2015	12.37	0.32	120.43
2016	12.50	0.31	113.49
2017	12.58	0.29	105.96
2018	12.65	0.28	98.51
2019	12.77	0.27	91.10
2020	12.88	0.26	83.97

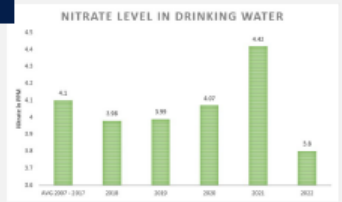
Maiden Creek

- From 2020-2023, 25 contracts, $2,556,000 obligated, 4,106 acres.
- This watershed stands out with long-term efforts from many partners.

USDA Natural Resources Conservation Service U.S. DEPARTMENT OF AGRICULTURE

Reading Area Water Authority · Philadelphia Water Department · Partnership for the Delaware Estuary · Schuylkill Action Network · Schuylkill River Greenways · Berks Nature · Department of Environmental Protection · Berks County Conservation District · Aqua

- Goals:
  - 10% decrease in Nitrate levels
    - (3.7 ppm from 4.1 in prior 10 years) for all RAWA testing sites
  - Acres treated:
    - of the 7,000 expected, treat 3,000 in the Lower Maiden Creek Watershed with >/= 90% in a critical source area CSA).
    - Treat 4,000 in the remaining watersheds while ensuring that 70% or more is in a critical source area.



- Progress:
  - Nitrates are currently down but have fluctuated due to storm events as evidenced by increased turbidity readings
  - 801/3,000 ac. goal in Lower Maiden Creek with 100% in a CSA; 3,305/4,000 ac. goal in the rest of the watershed.

Swatara Creek

- From 2020-2023, 90 plans 33 contracts, $3,903,215, 4,859 acres.
- A real-time monitoring device ("super gauge") was installed in partnership with USGS.
- Goals: 3 year: 10% reduction in turbidity; 5 year: 20% reduction in turbidity; Participation rate increase to 20% of farms (was 7% in EQIP)
- Progress: Average reduction in Peak Turbidity of 4% across all years. Ave. Annual Turbidity has decreased since 2018 baseline of 71 NTU; 7%.
- Progress towards participation rate is up to 12%.
- Overall, the data shows positive trends towards meeting turbidity and participation goals in this NWQI watershed.

	Ave. Annual Turbidity	Ave. Annual Peak Turbidity
	NTU	
2018	23	71
2019	21	76
2020	13	72
2021	12	62
2022	13	70
2023	12	60

	# Peak Storm Events	Total Annual Precipitation	Reduction in Ave. Annual Peak Turbidity
		Inches	
2018	20	47	-
2019	17	48	7%
2020	10	38	5%
2021	14	46	-15%
2022	11	42	-1%
2023	10	35	-18%
Ave.	14	46	-4%

Questions?

Comments?

Ashley Lenig
Conservation Program Manager (CSP, CIG, NWQI)
ashley.lenig@usda.gov

Adam Dellinger, RCPP Program Manager, was introduced and gave an overview on the Regional Conservation Partnership Program. (See attached hand-out) He began with explaining what RCPP funds: land management, land rentals, entity-held easements, United States-held easements. He followed up with an update on RCPP and stated that RCPP will obligate a total of $11,389,601. Adam ended his updates with reassurance that there are new projects coming in FY25! New proposals, in FY24, saw $1.5 billion available. They were funded by the Farm Bill and the Inflation Reduction Act (IRA). Proposals were due by July 2nd and the review process began shortly after. States submit recommendations to nationals, and they make the final decision by fall or winter.

USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

Regional Conservation Partnership Program (RCPP) Update

Adam Dellinger

State Technical Committee Meeting

7/24/24

Regional Conservation Partnership Program (RCPP)

- NRCS and Partners leverage resources to implement projects that demonstrate innovative solutions to conservation challenges, and provide measurable improvements to resource concerns.

- RCPP funds projects including a wide range of on-the-ground activities:
  - Land management/land improvement/restoration practices
  - Land rentals
  - Entity-held easements
  - United States-held easements

- Results in an outcome driven partnership with conservation, economic, and social outcomes.

New RCPP Land Management (BMP) Contracts

- 50 land management applications have been selected for funding in Fiscal Year 2024
- Will obligate a total of $11,389,601 in RCPP FA dollars
  - Obligated to date: $4,174,027
  - Obligated + Approved to date: $9,223,642 (81%)
- Projects with all FA obligated after FY24
  - Buffalo Creek Watershed Conservation Alliance
  - Lancaster's Common Agenda for Clean Water
  - Turkey Hill Clean Water Partnership
  - Delisting Ag-Impaired Streams in Central PA
  - Farmland Preservation and Climate Change Mitigation

FY23 RCPP Projects now underway

- **Expect to offer LM contracts in FY2025**
- **Scaling Adoption of Adaptive Nitrogen Management using Cover Crop Imaging and Nitrogen Crediting Technology**
    - Lead Partner: The Nature Conservancy
    - Award: $21,723,626
    - Project Area: Chesapeake Bay in PA, MD, and DE
    - Plant multi-species cover crops and use low-cost camera systems to produce variable rate fertilizer prescriptions for the following cash crop.
- **Mid-Atlantic Dairy Farmers Producing Tangible Results Through Climate Smart Solutions**
    - Lead Partner: Maryland and Virginia Milk Producers Cooperative Association
    - Award: $10,000,000
    - Project Area: Co-op milkshed within PA, MD, VA, and NC
    - Funding for member dairy farms to implement climate smart-practices which improve local water quality, yield GHG reductions, and improve soil health.

FY24 Notice of Funding Opportunity

- **$1.5 Billion available in FY24**
  - Funded from two separate authorizations:
    - 2018 Farm Bill
    - Inflation Reduction Act of 2022 (IRA)
  - Proposals were Due on July 2, 2024

- **Pennsylvania proposals**
  - 8 proposals submitted
    - PA is lead state on 5, partner state on 3
  - Total request of $178,356,999
  - Selections later this year, with agreement development likely in the fall

Please reach out with any questions

Adam Dellinger, RCPP Coordinator

adam.dellinger@usda.gov

717-237-2206

Susan Parry, PA NRCS Assistant State Conservationist for Programs, is introduced back to close out the meeting. She said that it had been talked about to potentially send out surveys for suggestions on how to improve the STC meetings and make it more appealing for partners. Next meeting takes place on October 24, 2024.

END OF MEETING- 2:08:10 (official run time)

1. Summary

Meeting title	**PA NRCS - January State Technical Advisory Committee meeting**
Attended participants	**30**
Start time	**7/24/24, 12:52:56 PM**
End time	**7/24/24, 3:23:33 PM**
Meeting duration	**2h 30m 37s**

2. Participants

Name	First Join	Email
Allison, Chad E (External)	7/24/2024	chad_allison@fws.gov
Anderson, Maria	7/24/2024	manderson@calwesteducators.com
Braswell , Dimka	7/24/2024	
Campbell, Brian - FPAC-NRCS, PA	7/24/2024	Brian.Campbell@usda.gov
Dalton, Dan - Pasa Sustainable Agriculture	7/24/2024	
Day, Diana	7/24/2024	
Dellinger, Adam - FPAC-NRCS, PA	7/24/2024	Adam.Dellinger@usda.gov
Garland, Cynthia - FPAC-FSA, PA	7/24/2024	cynthia.garland@usda.gov
Hand, Kristen	7/24/2024	khand@pa.gov
Hanner, Charles - FPAC-NRCS, PA	7/24/2024	charles.hanner@usda.gov
Hartman, Bob	7/24/2024	
Hebelka, Joseph	7/24/2024	jhebelka@pa.gov
Hintz, Dawn	7/24/2024	
Hughes, Kamie - FPAC-NRCS, PA	7/24/2024	Kamie.Hughes@usda.gov
Koch, Ryan	7/24/2024	kkoch@adamscountypa.gov
Lesher, Janette - FPAC-NRCS, PA	7/24/2024	janette.lesher@usda.gov
Ludwig, Daniel - FPAC-NRCS, PA	7/24/2024	dan.ludwig@usda.gov
Meghan Rogalus, PDE (Unverified)	7/24/2024	
Palmer, James - FPAC-NRCS, PA	7/24/2024	james.palmer@usda.gov
Parry, Susan - FPAC-NRCS, PA	7/24/2024	susan.parry@usda.gov
Pautler, Kevin - REE-NASS, Harrisburg, PA	7/24/2024	kevin.pautler@usda.gov
Peters, Tim	7/24/2024	tim.peters@usda.gov
Plowden, Yuri - FPAC-NRCS, PA	7/24/2024	yuri.plowden@usda.gov
Shippey, Jared - FPAC-NRCS, PA	7/24/2024	jared.shippey@usda.gov
Smeltz, Heather - FPAC-NRCS, PA	7/24/2024	heather.smeltz@usda.gov
Smith, Julia - Pheasants Forever	7/24/2024	
Spangler, Justin	7/24/2024	Justin@landstudies.com
Sweeney, Joe	7/24/2024	joe@waterscienceinstitute.org
Weld, Jennifer Lizabeth	7/24/2024	jlw23@psu.edu
Williamson, John	7/24/2024	johnw@teamaginc.com

Pennsylvania State Office

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State Technical Committee Meeting

Dates and Information

2025

Time:

1:00 PM

Wednesday, January 22, 2025
Thursday, April 24, 2025
Tuesday, July 22, 2025
Wednesday, October 22, 2025

Meeting Information

The meetings will be conducted via Microsoft Teams internet conferencing as well as in the USDA Conference Room at the NRCS State Office, which is located at 359 East Park Drive, Harrisburg, PA. The meeting link and a call-in telephone number is provided on the Agenda for the appropriate meeting.