Technical Assistance

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Core Competencies

Penn State University and Delaware Valley University

- Identifying Inadequate Practices
- Planning BMPS
- Designing and Implementation of BMPS

On the Job Training

Conservation Districts, NRCS, SCC

- Standards and Specs
- Design and Inspection of conservation practices

Continuing Ed / College Credit

- Feed Management Class
- Plant Sciences Class
- Soils Class

Technology Enhancement

- Penn State / Del Val
- Private Industry

Climate Practices

- Many groups can be involved in providing training for work targeting climate

On the Job Training

- Conservation Districts
- NRCS

Existing Formal Trainings

- Act 38 Trainings
- NRCS Boot Camps
- NRCS Certified Planner Trainings

Post Employment Training Cadre

- Paul Patterson
- Anne Swinker
- Pete Vanderstappen/Hosea Latshaw
- Scott Heckman
- Johan Berger
- Jerry Martin
- Marvin Hall
- Ginny Ishler

Continuing Ed / College Credit

- Feed Management Class – Managing nutrients fed to livestock?
- Plant Sciences Class – Focused on agronomy with an emphasis on conservation practices. Course could help new staff understand ways of "selling" conservation.
- Soils Class – Course to cover soils and their impact on conservation practices.

** Courses could be structured to qualify as 3 credits each

Technology Enhancement (Penn State / Del Val and Private Industry)

- Training to promote new and advanced conservation practices. Course to cover topics such as digester technology, bioreactors, bedding recovery systems, sand separation, dewatering systems, incinerators, gasifiers, etc.
- Provide an understanding of the technologies for staff to present as options to landowners and to properly plan as part of manure management systems.
- Universities along with private industry to contribute to this training.

Existing Formal Trainings (Act 38 Training Series, NRCS Boot Camps, NRCS Planner Trainings)

- Can other parties be brought in to offer these courses more frequently than they currently are held?
- Could Act 38 trainings go to 3 times per year instead of 2. Could the Boot Camps and Planner trainings be held a second time. Current trainers may be stretched thin already?
- Can anything be offered remotely or as a recording to reduce trainers' time commitment?

On the Job Training (Districts and NRCS)

- This will be a big part of any new employee's development
- Formalize a mentoring system to connect new staff with experienced staff in the same job series?
- On the engineering side, working through plans/designs and having work peer reviewed is how competence is often achieved

Post Employment Training Cadre

- Can this group offer the same Boot Camps, Planner trainings, Act 38 trainings additional times per year?
- Develop new trainings
  - Inspection layout of frequently installed engineering practices – Cover EFH Chapter 1 Surveying?
    - Waste Storage Facility/Concrete/Roof inspection workshop
    - Heavy use area/VTA inspection workshop
    - Grassed waterway/Diversion inspection workshop
    - Water systems/Water sources/Gravity/Pressure inspection workshop
  - Planning frequently contracted practices that could align with inspection workshops
    - Identifying inadequate practices / Resource concerns
    - Planning considerations for waste storages, HUAs, grassed waterways, and water systems for grazing
  - Design workshops (1 – 2 days each?). There is value in seeing installed practices in the field as part of these workshops.
    - Waterway workshop – spend part of the day doing a field survey, part of the day in the classroom designing the waterway, and part of a day doing layout
    - Water system workshop
    - Stormwater controls (Gutters, dripline drains, drop boxes, underground outlets). Could expand on the concepts presented in Boot Camp II.
    - Stream crossing, walkways, and access road workshop – spend time in the field surveying and then part of the time in the classroom.
    - Other topics? Roofs, Waste Storage, Waste Transfer, and other complex designs can't be covered in a 2 day workshop.

Climate Practices

- Training to reduce emissions, encourage soil carbon sequestration, reduce methane emissions
- Focuses on Soil Health, Certain Ag Waste Systems, Grazing and Forestry opportunities, etc
    - Training needed to promote
        - Conservation cover, cover crops, and crop rotations
        - No-Till and Reduced Till management
        - Contour Buffer strips, Field Borders, Filter Strips
        - Grassed Waterways
        - Digesters and Waste Separation Facilities
        - Prescribed Grazing and Pasture/Hay Planting
        - Forestry practices to improve forest, tree, and soil health

    ** many of these topics may overlap with other training opportunities listed

Center for Excellence

NRCS, Conservation District, and Penn State working together physically and virtually to schedule, train, and conduct quality assurance on practices being installed

NRCS: One agronomist, one engineer

SCC: One engineer

Penn State: Variety of innovation and discipline specialists

Formalized trainings, On-the-Job trainings, Quality assurance and spotchecks, Tracking technical expertise and capacity