

State Conservation Commission Meeting

May 10, 2016

Delaware Room

Farm Show Complex, Harrisburg PA

Agenda

Briefing Session – 10:00am; Delaware Room

Review of Business Agenda

SCC External Program Support Overviews

Dirt, Gravel and Low Volume Road Program

Nutrient & Odor Management Programs

Executive Session – 11:30; Susquehanna Room

Enforcement Cases

EHB Appeal Cases

Business Session – 1:00pm; Delaware Room

A. Opportunity for Public Comment

B. Business and Information Items

1. Approval of Minutes – March 8, 2016 (A)
April 12, 2016 (A)
2. Dirt, Gravel and Low Volume Road Maintenance Program – Roy Richardson, SCC
 - a. FY 2016-17 Allocations to Conservation Districts (A)
 - b. Proposed Changes to Driving Surface Aggregate (DSA) Standards and Specifications (A)
 - c. Center for Dirt and Gravel Road Studies, Education and Technical Assistance Work Plan and Budget (A)
3. REAP Program 2016-17 Proposed Guidelines and Application, Joel Semke, SCC (A)
4. Nutrient & Odor Management Program
 - a. Proposed FY 2016-17 Nutrient/Manure Management Delegation Agreement Funding Levels, Frank Schneider, SCC (A)
 - b. Penn State FY 2016-17 Education & Technical Assistance Support, Annual Work Plan Proposals, Johan Berger, SCC (A)
 - i. Nutrient Management Specialist Certification & Education Program (A)
 - ii. Odor Management Specialist Certification & Education, Manure Hauler and Broker Certification and, Assessment of Animal production Sites Program (A)
 - iii. Nutrient Management Educational Program One-Stop Training Workshops (A)
 - c. Fiscal Year 2016-17 Proposed Nutrient Management Budget (A)
 - d. Nutrient Management Advisory Board, Confirmation of Appointments, Larry Baum, SCC (A)

- e. Nutrient Management Education Program, Revisions to the Manure Nutrient Values, Penn State Agronomy Guide, Frank Schneider, SCC (A)
- 5. Chesapeake Bay Program Update: Reboot, CB Technician Agreements - Veronica Kasi, DEP (NA)
- 6. In Balance Conference Update and Future Plans - (NA)

C. Written Reports

- 1. Program Reports
 - a. Act 38 Nutrient Management Program
 - b. Act 38 Facility Odor Management Program - Status Report on Plan Reviews
 - c. Certification and Education Programs
 - d. REAP Program
 - e. Dirt, Gravel & Low Volume Road Maintenance Program
 - f. 2015 Dirt, Gravel & Low Volume Road Maintenance Program Annual Report
- 2. Ombudsman Program Reports – Southern Allegheny Region (Blair County Conservation District and Lancaster County Conservation District.

D. Cooperating Agency Reports

Adjournment

Next Public Meetings June 14th Conference Call
July 27th Meeting in State College

STATE CONSERVATION COMMISSION MEETING
PA Dept of Ag, Harrisburg
Tuesday, March 8th @ 1:00 p.m.

Draft Minutes

Members Present: Secretary Russell Redding, PDA; Dep. Sec. Greg Hostetter, PDA; Kelly Heffner, Deputy Secretary, DEP; Michael Flinchbaugh; Ron Kopp; Ron Rohall; Sec. Cindy Adams-Dunn, DCNR; Denise Coleman, NRCS; Glen Seidel, PACD; Gary Smith, NRCS.

A. Public Input

There were no public comments presented.

B. Business and Information Items

1. Approval of Minutes - February 9, 2016 Public Meeting (A)

Mike Flinchbaugh moved to approve the February 9, 2016 minutes. Motion seconded by Kelly Heffner. Motion carried.

2. PA Conservation Explorer Tool (NA), Sec. Cindy Adams-Dunn; Ellen Shulzabarger, DCNR

Ellen Shulzabarger, DCNR Ecological Services Division Chief, reported that PA DCNR has developed a tool to replace the current Pennsylvania Natural Diversity Inventory (PNDI) Tool. This new tool, PA Conservation Explorer, will include both conservation related planning, as well as PNDI environmental components. This combination of resources and tools will provide greater access to information resulting in better planning and reduced project impacts. The estimated release date of the new tool is March 21.

3. Chesapeake Bay Implementation Grant Program Technician/Engineer Funding Announcement (NA), Steven W. Taglang, DEP

Steve reported that DEP is announcing the availability of funds to support conservation district Chesapeake Bay Technician and Engineering positions for FY 2016-17. These funds are available to conservation districts within the Pennsylvania portion of the Chesapeake Bay watershed and may be used to employ technical personnel, obtain technical services, or to acquire equipment and supplies. Districts can receive a grant between \$15,000-\$300,000.

4. Dirt Gravel, Low Volume Road Program (NA), Roy Richardson, SCC

a. Annual Summary Report and Update

Roy reported that the Dirt, Gravel and Low Volume Road Program has been busy in the multi-year ramp-up of the program from a \$4 million funding base to its current \$28 million funding base. Both SCC and Penn State Center staff have been very active in this transition, helping to support conservation districts as they tackle larger and more complex projects across the state.

b. Proposed 2016-2017 Conservation District Allocation Formula

Roy reported that the recommended formula for 2016-2017 will remain the same as the previous year.

c. Driving Surface Aggregate (DSA) standards and specifications

Roy Richardson reported that DGLVR Program staff and Center staff have worked closely with conservation districts, PennDOT and the aggregate industry to formulate recommended changes to the DSA standards and specifications. Based on this discussion, staff is recommending that the Commission adopt a revised DSA standard that will allow greater flexibility in certain cases, such as small projects. Staff will present the final recommended changes to the Commission at its May 10th meeting.

5. SCC General Advisory Committee Activity Update (NA), Karl G. Brown, SCC

Karl reported that on February 24th, the Commission's new General Advisory Committee (GAC) held its first conference call to discuss possible mid and long term changes to the Conservation District Fund Allocation Program (CDFAP). All but one member of the committee was able to participate on the conference call. The primary discussion was a revised strategy that focuses on expanding and implementing the short-term Ag-BMP recommendations, while setting aside the mid and long term proposals to ear-mark a percentage of CDFAP for Ag-BMP purposes. Under this revised strategy, the short-term proposal will be expanded to include all counties within the PA portion of the Chesapeake Bay Watershed.

C. Written reports

1. Program Reports
 - a. Act 38 Nutrient Management Program
 - b. Act 38 Facility Odor Management Program - Status Report on Plan Reviews
 - c. Certification and Education Programs
 - d. REAP Program
2. Ombudsman Program Reports – Southern Allegheny Region (Blair County Conservation District and Lancaster County Conservation District).

D. Cooperating Agency Reports

Secretary Russell Redding, PDA

Secretary Redding reported that the Delaware CREP Program will be announced shortly. AI is still a threat to PA's poultry production and remember to practice bio security. PSU's self-reporting survey has been released. 1,200 have been returned as of March 8.

Kelly Heffner, DEP

Kelly reported that March 15 is All Bay Day at Bucknell College. DEP is happy to announce that Nicki Kasi is the new Chesapeake Bay Program Manager.

Cindy Dunn, DCNR

Cindy reported that DCNR is setting up a riparian buffer steering committee. The first meeting will take place in a few weeks.

Gary Smith, NRCS

Gary reported that Bootcamp 1 & 2 will take place during the last week of March.

Glenn Seidel, PACD

Glenn thanked the Commission for the USGS presentation that happened before the meeting.

F. Adjournment

The next Commission public meeting is scheduled for May 10, 2016 at 1:00 p.m. at the Pa Farm Show Complex, Harrisburg PA.

Note: As a part of the morning Commission briefing session, Scott Phillips, USGS Chesapeake Bay Program Coordinator, provided an educational update regarding the nutrient and sediment trends in the Pennsylvania portion of the Chesapeake Bay Watershed.

STATE CONSERVATION COMMISSION CONFERENCE CALL

Tuesday, April 12, 2016

Draft Minutes

Members Present: Secretary Russell Redding, PDA; Dep. Sec. Greg Hostetter, PDA; Kelly Heffner, Deputy Secretary, DEP; Michael Flinchbaugh; Ron Kopp; Ron Rohall; Drew Gilchrist for Sec. Cindy Adams-Dunn, DCNR; Brenda Shambaugh, PACD.

A. There was a Roll Call of members and a Quorum was present.

B. DEP, DCNR and PDA provided Agency Updates

C. Information & Action Items

1. Roy Richardson provided the following information on the Dirt, Gravel and Low Volume Road Program

a) FY2016 Allocations and PSU Center for Dirt & Gravel Road Studies 'Scope of Work' – SCC and Center for Dirt and Gravel Road Studies at Penn State University (Center) staff have been working with the “Policy and Planning” and “Low Volume Road” advisory workgroups on the allocation methodology used to distribute funding to Conservation Districts. For fiscal year 2016-17, the workgroups recommend that the SCC continues to allocate funds separately, with \$20 million for Dirt and Gravel (D&G) and \$8 million for paved Low-Volume Roads (LVR).

The Center provides education, outreach, and technical assistance to conservation districts and local road owning entities throughout Pennsylvania as part of the Dirt, Gravel, and Low Volume Road Maintenance Program (Program). FY 2016-17 represents "year 3" of a 5-year contract between the Center and the PA State Conservation Commission. Roy Richardson reviewed the draft recommendations for the FY2016-17 allocations and the Scope of Work in preparation for consideration by the Commission at its May 2016 public meeting.

b) Proposed DSA Standards and Specifications. SCC and Center staffs have been working with the “Policy and Planning” advisory workgroup to develop a new Driving Surface Aggregate (DSA) specification for use in SCC funded DGLVRP projects. The new specifications would replace the current requirement to follow the PennDOT DSA specification. Since the March SCC meeting, SCC and Center staff met with the Pennsylvania Aggregates and Concrete Association (PACA) on 3/18/16 to review their comments to the new draft DSA specification. PACA’s comments were reviewed by the advisory workgroup and incorporated into the new draft specification. Roy Richardson reviewed the draft DSA specifications with the Commission in preparation for consideration for approval by the Commission.

2. Joel Semke provided the following information on REAP – Revisions for the FY2016-17 program application forms - In preparation for the development of the 2016-2017 REAP Guidelines and Application, program staff has developed several clarifications and revisions to specific forms in the REAP application. Joel Semke discussed these clarifications with the Commission during the conference call with the objective of approving any proposed revisions to the REAP Guidelines and Application for 2016-2017 at the May 2016 public meeting. Joel also updated the Commission on program activities since March 1, 2016.

3. Frank Schneider provided the following information on the Nutrient Management Program

a) Revisions to the Manure Nutrient Values in the Penn State Agronomy Guide. Table 1.2-13, the average daily production and total nutrient content (of manure) table, published in the *Penn State Agronomy Guide*, is a reference document that can be used for the development of Nutrient Management Plans (NMPs) under Act 38. Over the last several years, staff has received requests from plan writers requesting the addition of certain animal manure groups that are currently not identified in Table 1.2-13, such as liquid beef manure and solid swine manure. Staff and Penn State Cooperative Extension (PSU) have been reviewing a possible update to Table 1.2-13 based on these requests. Frank Schneider reviewed the options that were evaluated regarding these requests and recommended revisions to Table 1.2-13 that will be presented to the Commission for consideration at the May 10, 2016 Commission meeting.

b) Revisions to Standard Animal Weights for nutrient management planning. The current animal weights that are used in the Act 38 Nutrient Management Plan (NMP) program were developed in 2010 to reflect current livestock weight standards in Pennsylvania's livestock industry, at the time. Staff has received many requests from certified NMP writers indicating that the average weights and grouping of different production cycles is not current with the current trend in Pennsylvania Agriculture. Penn State swine industry experts also inquired about updating the swine numbers and NMP specialists that work in the duck industry indicated that the duck numbers and groupings were not reflective of the industry. Based on those requests, program staff and Penn State Cooperative Extension felt it was best to review and update all animal species and groupings to current Pennsylvania industry standards, representative of what actually exists in Pennsylvania. Frank Schneider updated the Commission on possible changes to the 'Standard Animal Weights' that are utilized in the Act 38 Nutrient Management Program. No action is required at this time.

4. Johan Berger provided the following information on the CDFAP Ag BMP Pilot Project. – At its November 10, 2015 public meeting, the State Conservation Commission approved the use of up to \$500,000 of uncommitted Conservation District Fund Allocation Program funds (CDFAP), for a pilot project for Agricultural BMP (Ag BMP) implementation in selected county conservation districts. Based on input from conservation districts and discussions with the Governor's Policy Office, a revised strategy to decouple short-term pilot proposal (\$500k) from mid-term and long-term components was developed. In the short-term, the Ag BMP Pilot Project will continue to move forward and provide up to \$500,000 in a '1:1 match' for implementation of agricultural BMPs within Pennsylvania's portion of the Chesapeake Bay Watershed. The mid-term recommendations to earmark 5% (FY 2016-17) and 10% (FY 2017-18) will not be pursued at this time.

Conservation districts willing to commit a portion of their CDFAP/UGW and PUC 'Block Grant' funds received in the 2015-16 fiscal year (July 1, 2015 – June 30, 2016) or any FY 2014-15 CDFAP/UGW and PUC 'Block Grant' funds distributed to the district and available for use are eligible to be considered to receive "match" funds from the Commission. Johan Berger updated the Commission of the revised implementation strategy for this project and current funding request activities from conservation districts.

5. Adjournment at 9:45 AM



COMMONWEALTH OF PENNSYLVANIA
STATE CONSERVATION COMMISSION

Agenda Item: B.2.a

Date: April 25, 2016

To: State Conservation Commission

From: Roy Richardson, Dirt and Gravel Roads Program Coordinator

Through: Karl G. Brown, Executive Secretary *KLB*

RE: Dirt, Gravel, and Low Volume Roads Program (DGLVRP) Proposed Allocations

Proposed Allocations for FY 2016-2017

Background – The Transportation and Vehicle Code Omnibus Amendment Act (Act 89-2013, P.L. 974, Section 9106) provides for an annual appropriation of funds to the DGLVR program. Funds in the amount of \$28,000,000 shall be appropriated annually to the State Conservation Commission (SCC) and administered in a non-lapsing, nontransferable account restricted to maintenance and improvement of dirt, gravel and low volume state and municipal roads. The SCC shall apportion the funds based on written criteria it develops to establish priorities based on preventing dust and sediment pollution. A minimum of \$8,000,000 of the total appropriated annually shall be for maintenance and improvement of low volume roads (LVR).

LVR Allocation – An allocation formula was approved by the SCC in May, 2014. The formula considers the miles of low volume state roads and the miles of potential low volume municipal roads. Roads are weighted according to proximity to streams, and according to urban vs rural classifications as determined by census data. Prior to funding, roads must be verified with a current traffic count to show that the average daily traffic count is 500 vehicles a day or less.

DGR Allocation – The allocation formula for dirt and gravel roads was approved by the SCC and has been in place for many years. The formula considers the number and miles

of identified worksites, miles of roads, cost of limestone, and gives weight to projects in HQ/EV watersheds.

2016-2017 Allocations – The policy and planning workgroup and the low volume workgroup met to review the allocation formulas. The workgroup recommends using the current formula with no changes this year.

The recommended FY 2016-17 low volume road county allocations did not change from last year.

The recommended FY 2016-17 Dirt and Gravel Road county allocations will vary from last year, with changes ranging from +17% to -8%. These changes are not due a change in formula, but are based on:

- changes to the base data resulting from the migration to the new GIS system
- GIS updates made by districts
- changes to the cost of limestone, and
- the fact that all Conservation Districts are eligible for funding this year (one was ineligible last year).

Both proposed dirt and gravel road and low volume road allocations are attached. Staff recommends approving the allocations as proposed. Allocations will be contingent on the approval of a final FY 2016-17 state budget.

PA State Conservation Commission - Dirt, Gravel, and Low-Volume Road Maintenance Program

Proposed Dirt and Gravel Road Allocation for FY 2016-17

for SCC approval 5/10/2016

Proposed Allocation
FY 2016-17

Adams	\$	100,000	*
Allegheny	\$	100,000	*
Armstrong	\$	907,647	
Beaver	\$	100,000	*
Bedford	\$	282,853	
Berks	\$	100,000	*
Blair	\$	100,000	*
Bradford	\$	1,375,000	**
Bucks	\$	100,000	*
Butler	\$	162,760	
Cambria	\$	115,628	
Cameron	\$	134,175	
Carbon	\$	100,000	*
Centre	\$	152,322	
Chester	\$	100,000	*
Clarion	\$	374,777	
Clearfield	\$	425,567	
Clinton	\$	169,630	
Columbia	\$	380,598	
Crawford	\$	748,035	
Cumberland	\$	100,000	*
Dauphin	\$	100,000	*
Elk	\$	157,608	
Erie	\$	311,257	
Fayette	\$	250,466	
Forest	\$	116,208	
Franklin	\$	100,000	*
Fulton	\$	140,471	
Greene	\$	410,859	
Huntingdon	\$	278,741	
Indiana	\$	526,749	
Jefferson	\$	314,918	
Juniata	\$	103,996	

Proposed Allocation
FY 2016-17

Lackawanna	\$	131,662	
Lancaster	\$	103,377	
Lawrence	\$	100,000	*
Lebanon	\$	100,000	*
Lehigh	\$	109,312	
Luzerne	\$	204,464	
Lycoming	\$	417,928	
McKean	\$	215,248	
Mercer	\$	214,062	
Mifflin	\$	100,000	*
Monroe	\$	100,000	*
Montgomery	\$	100,000	*
Montour	\$	100,000	*
Northampton	\$	100,000	*
Northumberland	\$	205,971	
Perry	\$	147,807	
Pike	\$	120,069	
Potter	\$	778,382	
Schuylkill	\$	183,928	
Snyder	\$	121,472	
Somerset	\$	292,407	
Sullivan	\$	377,485	
Susquehanna	\$	1,375,000	**
Tioga	\$	1,058,669	
Union	\$	100,000	*
Venango	\$	536,017	
Warren	\$	587,893	
Washington	\$	361,566	
Wayne	\$	508,096	
Westmoreland	\$	165,953	
Wyoming	\$	291,627	
York	\$	371,340	
District Total	\$	18,620,000	

Allocation for Dirt and Gravel funds only. Low-Volume Road funds allocated separately.

* minimum allocation of \$100,000 applies

** maximum allocation of \$1,375,000 applies

all counties met SCC 2-year spending requirements and are eligible for a FY 2016-17 allocation

PA State Conservation Commission - Dirt, Gravel, and Low-Volume Road Maintenance Program

Proposed Low-Volume Road Allocation for FY 2016-17

for SCC approval 5/10/2016

Proposed Allocation
FY 2016-17

Adams	\$	121,803
Allegheny	\$	267,932
Armstrong	\$	131,689
Beaver	\$	101,664
Bedford	\$	178,081
Berks	\$	262,545
Blair	\$	80,817
Bradford	\$	103,138
Bucks	\$	182,980
Butler	\$	181,592
Cambria	\$	112,453
Cameron	\$	40,000 *
Carbon	\$	50,523
Centre	\$	102,926
Chester	\$	201,534
Clarion	\$	96,669
Clearfield	\$	122,597
Clinton	\$	55,175
Columbia	\$	86,206
Crawford	\$	106,118
Cumberland	\$	128,225
Dauphin	\$	120,963
Elk	\$	40,000 *
Erie	\$	128,752
Fayette	\$	146,934
Forest	\$	40,000 *
Franklin	\$	124,156
Fulton	\$	62,167
Greene	\$	108,893
Huntingdon	\$	109,624
Indiana	\$	164,917
Jefferson	\$	94,901
Juniata	\$	72,467
Lackawanna	\$	74,655

Proposed Allocation
FY 2016-17

Lancaster	\$	285,720
Lawrence	\$	103,945
Lebanon	\$	83,995
Lehigh	\$	105,039
Luzerne	\$	152,061
Lycoming	\$	117,870
McKean	\$	62,374
Mercer	\$	136,377
Mifflin	\$	53,824
Monroe	\$	113,572
Montgomery	\$	164,832
Montour	\$	40,000 *
Northampton	\$	117,091
Northumberland	\$	104,981
Perry	\$	107,320
Pike	\$	40,000 *
Potter	\$	55,657
Schuylkill	\$	157,026
Snyder	\$	68,808
Somerset	\$	180,054
Sullivan	\$	40,000 *
Susquehanna	\$	64,407
Tioga	\$	56,888
Union	\$	44,714
Venango	\$	76,012
Warren	\$	55,029
Washington	\$	203,097
Wayne	\$	85,655
Westmoreland	\$	266,215
Wyoming	\$	41,230
York	\$	261,111
District Total	\$	7,448,000

Allocation for Low Volume Road funds only. Dirt and Gravel funds allocated separately.

* minimum allocation of \$40,000 applies

no allocations were influenced by the cap of \$550,000



COMMONWEALTH OF PENNSYLVANIA
STATE CONSERVATION COMMISSION

Agenda Item: B.2.b

Date: April 25, 2016
To: State Conservation Commission
From: Roy Richardson, Dirt and Gravel Roads Program Coordinator
Through: Karl G. Brown, Executive Secretary
RE: Changes to Driving Surface Aggregate (DSA) standards and specifications

Driving Surface Aggregate (DSA)

Driving Surface Aggregate (DSA) is currently the only surface aggregate approved for funding under the program. The program uses the PennDOT specification MS-0450-004. While the use of this specification has worked for the program, Commission and Center staff, in conjunction with the Policy and Planning workgroup, recommends adopting a new standard for several reasons:

- **Availability of Material** – The current PennDOT specification requires that all DSA be purchased from a PennDOT approved quarry. There are a number of smaller quarries in the state who are not on the PennDOT approved list, but they can produce quality DSA that meets all of the program standards. Allowing these quarries to provide DSA will increase the supply of quality material.
- **Flexibility** - any changes to the current PennDOT specification – even minor wording changes- can take a significant amount of time. By adopting our own standards, the Commission will have the ability to make more timely adjustments, if needed.
- **Local Control** – The current PennDOT specification requires paver placement of DSA and compaction testing on all jobs, regardless of size. The proposed new standards will require paver placement and compaction testing for all jobs greater than 1,000 tons (equivalent to an 8” lift of DSA, 18’ wide, 1,500 feet long). For projects less than 1,000 tons, local conservation districts may keep these requirements, or they can adopt their own. For example - If a conservation district has a small project that only requires 300 tons of DSA they can decide to allow a township to “Tailgate” the DSA rather than pay expensive mobilization costs to bring in a paver.

Commission and Center staff have met with the policy and planning workgroup numerous times to develop the new proposed standards and specifications. Several meetings were held with the Pennsylvania Aggregate and Concrete Institute (PACA) to allow the industry the opportunity to comment. In addition, the draft standards and specifications was sent to all conservation districts for comments.

Staff recommends adopting these new standards and specifications.

PA State Conservation Commission

Driving Surface Aggregate Standard and Specification

- I. **Definition** - This document is for the purchase and placement of Driving Surface Aggregate (DSA) for the Pennsylvania State Conservation Commission's Dirt, Gravel, and Low-Volume Road Maintenance Program (DGLVRMP). DSA is an aggregate mixture of crushed stone designed specifically as a surface-wearing course for unpaved roads. DSA provides a durable road surface with longer maintenance cycles than conventional road surface aggregates.
- II. **Use** - For the purposes of funding under the DGLVRMP, DSA must be used in areas where it will have an environmental benefit (reduced erosion, reduced runoff). DSA shall only be placed after drainage and subgrade issues have been addressed by utilizing practices that promote Environmentally Sensitive Maintenance. DSA was originally designed to reduce erosion and runoff on road segments close to streams where drainage improvements were limited. Surface aggregate is not required on every project.
- III. **Material** - DSA to be used on DGLVRMP projects shall be tested prior to delivery by an independent lab that has no affiliation with the source quarry. Samples shall be obtained by Conservation District (CD) staff, Center for Dirt and Gravel Road Studies (CDGRS) staff, or otherwise approved by the SCC. Material must meet the following requirements:

- A. **Gradation:** The required sieve sizes and allowed ranges, determined by weight, for DSA components are shown in Table 1.

Sieve Size	Percent Passing
1.5"	100
0.75"	65 – 95
#4	30 – 65
#16	15 – 30
#200	10 – 15

Table 1 – DSA Gradations

- B. **Abrasion Resistance:** The loss of mass (LA Abrasion) shall be less than 40%. Determine the resistance to abrasion using the Los Angeles Abrasion test, ASTM C131.
- C. **pH:** Aggregate shall be in the range of pH 6 to pH 12.45 as measured by ASTM D4972.
- D. **Moisture:** Upon delivery to the site, material shall be well mixed and placed at optimum moisture content or up to 2% below that value as determined for that particular source. The optimum percentage moisture is to be determined using Proctor Test ASTM D698, Procedure C, Standard. Aggregate provider is encouraged to perform moisture testing prior to loading material for delivery.
- E. **Plasticity:** Material shall not exceed a Plasticity Index (PI) of 6. The laboratory test required for these results is ASTM D4318 – Standard Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
- F. **Soundness:** Determine the percentage of mass (weight) loss of each fraction of the coarse aggregate

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after five cycles of immersion and drying using a sodium sulfate solution according to PTM No. 510. The maximum weighted percent loss allowed is 20%. The Conservation District may accept aggregate failing the soundness test if it can be demonstrated that the material has a satisfactory service record.

- G. **Aggregate:** All DSA shall be derived from natural rock formations that meet program specification for abrasion resistance, pH and freedom from contaminants.
- H. **Fines:** If fines need to be added to the aggregate to meet DSA gradation requirements, the added material passing the #200 sieve must be derived from rock material that conforms to program specifications. No mineral clay or silt soil may be added. The amount of particles passing the #200 sieve shall be determined using the washing procedures specified in PTM No. 100.
- I. **Mixing:** DSA shall be properly mixed and at the proper moisture content before it is loaded onto the transport vehicles.

IV. **Delivery and Placement**

- A. **Preparation of Subgrade:** Unsatisfactory drainage and subgrade conditions shall be corrected prior to placement by scarifying, reshaping, and re-compacting, or by replacing or importing subgrade/sub-base. The subgrade/subbase shall be crowned or sidesloped to $\frac{1}{2}$ to $\frac{3}{4}$ inch per foot (4%-6% slope). Beginning and ending of DSA placements shall include a paving notch across the width of the subgrade. The paving notch shall have a minimum depth equal to the compacted DSA placement, and a sufficient length to facilitate transition into existing road surface.
- B. **Transport:** Tarps shall be used to cover 100% of the load's exposed surface from the time of loading until immediately before placement.
- C. **Certification:** A properly executed SCC DSA Certification Form shall be provided at the time of initial delivery and subsequent certification forms shall be provided if quarry conditions change. This Certification Form is to apply to the specific stockpile of DSA material being delivered from the source. The form certifies that the DSA material meets all of the specifications and requirements.
- D. **Placement:** The use of a motorized paver is highly recommended for all DSA placements. For projects and/or contracts including over 1,000 tons of DSA, a motorized paver is required. A track mounted paver is preferred. DSA placements should be placed in a single pass. The crown or cross slope must range from $\frac{1}{2}$ to $\frac{3}{4}$ inch per foot (4-6%). Material shall be placed in a single 6-8 inch loose lift. This lift is to be compacted with a vibratory roller as specified in Section V Compaction. If freezing temperatures or precipitation are forecast that may cause the material to freeze, or prevent the material from drying out, placement shall be postponed at the discretion of the road owner, Conservation District, or aggregate supplier.

V. **Compaction**

- A. **Vibratory Roller:** After placement, the material shall be compacted using a minimum ten-ton vibratory roller. DSA shall be compacted to a minimum of 95% of the dry-mass (dry-weight) density according to ASTM D698, Procedure C, Standard as determined by pre-sampling (refer to Materials, Section III.D). The road owner, or its designated representative, reserves the right to determine the in-place moisture

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and density according to ASTM D6938.

VI. **Maintenance** - Properly placed and compacted DSA provides a durable road surface with longer maintenance cycles than traditional aggregates, but it is not maintenance free. Refer to the Center for Dirt and Gravel Roads "Driving Surface Aggregate Handbook" for additional guidance on DSA maintenance.

VII. **References:**

- A. State Conservation Commission Driving Surface Aggregate Certification Form.
http://www.dirtandgravel.psu.edu/sites/default/files/General%20Resources/DSA/SCC_DSA_Spec_2014.pdf
- B. Penn State Center for Dirt and Gravel Road Studies "Driving Surface Aggregate Handbook"
<http://www.dirtandgravel.psu.edu/general-resources/driving-surface-aggregate-dsa>
- C. ASTM C131 [AASHTO T96] - Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.
<http://www.astm.org/Standards/C131>
- D. ASTM D4972 - Standard Test Method for pH of Soils. <http://www.astm.org/Standards/D4972>
- E. ASTM D698, Procedure C, Standard [AASHTO T99] – Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³)).
<http://www.astm.org/Standards/D698>
- F. ASTM D4318 [AASHTO T89/90] – Standard Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
<http://www.astm.org/Standards/D4318>
- G. Pennsylvania Test Method No. 100. - Method of Test for amount of material finer than 75 µm (no. 200) sieve in aggregate.
http://www.dot.state.pa.us/public/pdf/BOCM_MTD_LAB/PUBLICATIONS/PUB_19/PTM-100.pdf
- H. Pennsylvania Test Method No. 510 – Method of Test for soundness of aggregate by use of sodium sulfate. http://www.dot.state.pa.us/public/pdf/BOCM_MTD_LAB/PUBLICATIONS/PUB_19/PTM-510.pdf
- I. ASTM D6938 [AASHTO T310] – Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).
<http://www.astm.org/Standards/D6938>



COMMONWEALTH OF PENNSYLVANIA
STATE CONSERVATION COMMISSION

Agenda Item: B.2.c

Date: April 25, 2016

To: State Conservation Commission

From: Roy Richardson, Dirt and Gravel Roads Program Coordinator

Through: Karl G. Brown, Executive Secretary

RE: Center for Dirt and Gravel Road Studies FY 2016-2017 Budget

Proposed Budget for FY 2016-2017

Background – In May 2014, the Commission approved a 5-year program support agreement with the Penn State Center for Dirt and Gravel Road Studies. The agreement included an annual budget allocation of \$1,372,000 for each year of the agreement. The annual budget for this agreement is reviewed each year and presented to the Commission for approval. While the proposed FY 2016-17 budget funding remains at \$1,372,000, some of the budget categories for FY 2016-17 have adjusted to reflect current needs. For example:

- Personnel Costs - Reduced to \$859,124 from \$978,719 in FY 2015-16
- Travel Expenses – Increased to \$227,900 from \$161,400 in FY 2015-16
- Operational Expenses – Reduced to \$219,976 from \$221,881 in FY 2015-16
- Purchased Services – Increased to \$65,000 from \$10,000 in FY 2015-16

A copy of the budget, budget explanation, and scope of work is attached. Steve Bloser, Director of the Penn State Center for Dirt and Gravel Road Studies, will be on hand to report on last year's deliverables, and to answer any questions.

Scope of Work
(July 1, 2016 – June 30, 2017)

Submitted To:

Dirt, Gravel, and Low-Volume Road Maintenance Program (Program)
Pennsylvania State Conservation Commission (SCC)
Pennsylvania Department of Agriculture

Performing Organization:

Center for Dirt & Gravel Road Studies (Center)
The Thomas D. Larson Pennsylvania Transportation Institute
Department of Civil and Environmental Engineering
The Pennsylvania State University (Penn State)
201 Transportation Research Building
University Park, PA 16802-4710

Principal Investigator: Steven M. Bloser, 814-865-6967
Larson Institute Administrative/Contractual Contact: Frank C. Butts, 814-865-1942

FY 2016-17 represents "year 3" of a 5-year contract between the Center and the SCC. The work plan below is for FY 2016-17, but also includes anticipated work items for the two remaining years of the contract.

The Center provides education, outreach, and technical assistance to Conservation Districts and local road owning entities throughout Pennsylvania as part of the PA Dirt, Gravel, and Low Volume Road Maintenance Program (Program).

1) ENVIRONMENTALLY SENSITIVE MAINTENANCE (ESM) TRAINING COURSE

- a) **Description:** The two-day ESM training course focuses on the connection between road maintenance activities and surface water quality, and covers all of the road maintenance practices promoted by the Program. It also covers the basics of Program functionality and how to apply for Program funding. Municipalities or other road-owning entities who wish to apply for Program funding must have attended the ESM training within the previous 5 years in order to be eligible for funding.
- b) **FY 2016-17:** The Center will:
- (1) Continue to provide ESM trainings throughout the state. The annual number to be based on requests for trainings by eligible entities and the recommendations of the SCC. Some of these training may be larger-scale "regional" trainings. It is estimated that 12 ESM trainings will be held in FY 2016-17 for approximately 700 attendees.
 - (2) Be responsible for training scheduling, logistics, publicity, registration, provision of continuing education units upon request, and attendee certification tracking and verification.
 - (3) Provide at least 2 trainers per session along with all necessary classroom equipment.
 - (4) Provide for training facility and necessary meals.
 - (5) Provide attendees with printed material related to the ESM training and instructions on applying for funds
 - (6) Update ESM training with new material and field project experience.
- c) **FYs 2017-19:** The Center will:

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- (1) Provide trainings with similar deliverables described above for FY 2016-17.
- (2) The number and size of trainings to be held will be determined based on
 - (i) demand from local entities.
 - (ii) the relative success of larger “regional” trainings.
 - (iii) the recommendations of the SCC and Program advisory groups

2) **ANNUAL MAINTENANCE WORKSHOP**

- a) **Description:** Annual conference focusing on current issues and new practices related to the Program practices, procedure, and projects. This is a 2-3 day event with concurrent classroom session, invited speakers, and multiple field trips. It is held at a different location within PA each year.
- b) **FY 2016-17:** Plans are currently underway to hold the 2016 Workshop on the last week in September in York, PA. The Center will work with established advisory workgroups in developing classroom and field topics for the workshop. The Center will handle all of the logistics for the workshop including coordination of field trips, classroom sessions, meals, buses, agendas, registration, etc.
- c) **FYs 2017-2019:** The Center plans to continue to conduct the Annual Maintenance Workshop. Preliminary planning is underway to hold the workshop in Tioga County in 2017. The Center will make adjustments to the Workshop duration and format to accommodate attendance and subjects to be addressed. It is anticipated that a workshop will continue to be held every fall at a different location in Pennsylvania. Any potential changes to the workshop format, timing, etc. will be made through recommendations by the Program’s advisory groups, in which both SCC and Center staff participate.

3) **FIELD OPERATIONS AND TECHNICAL ASSISTANCE**

- a) **Description:** The Center provides a wide range of technical assistance education to Conservation Districts and local public road owners statewide regarding road projects funded by the Program. Technical assistance on road projects can include, but is not limited to:
 - (1) E-mail and phone response to specific project questions with varied levels of response required.
 - (2) Walkthrough of potential projects to assist in work plan development.
 - (3) Review and improvement suggestions for project applications.
 - (4) Pre, during, and post-project site visits to address specific project issues or questions.
 - (5) Detailed project walkthroughs for educational purposes, involving multiple site visits, especially in cases where there is new staff at the local Conservation District.
 - (6) Visits to assess post-project performance issues and remediation actions.
 - (7) More in-depth project oversight and on-site training in some cases.
- b) **FY 2016-19:** The Center will:
 - (1) Handle daily support via phone and e-mail regarding project technical assistance throughout the counties involved in Program.
 - (2) Handle an estimated 150+ on-site technical assistance visits and at least 20 “in-depth” project oversight visits annually. The amount and type of technical assistance will be based on demand.
 - (3) Work to implement an improved tech-assist tracking and distribution system that will allow better summary of technical assistance efforts.

4) **PROGRAM TECHNICAL ASSISTANCE**

- a) **Description:** In addition to technical assistance related to “field operations” described above, the Center also provides a wide range of other assistance to entities involved in the Program. These services include but are not limited to:
 - (1) General e-mail and phone support on a wide variety of Program-related questions (project eligibility, spending issues, Program policy questions, GIS issues, etc.)
 - (2) On-site walkthrough of programmatic issues at county offices when issues arise or when new staff comes on board with the District.
- b) **FY 2016-19:** The Center will continue to serve as the “help desk” for general program questions and issues from participants. Office visits to Conservation Districts will be conducted on an as needed basis to address issues or to assist new District staff.

5) **GEOGRAPHIC INFORMATION SYSTEMS (GIS) AND REPORTING**

- a) **Description:** Since the Program began, the Center has maintained a customized GIS system is used by County Conservation Districts throughout Pennsylvania to track location, project data, and spending information on the inventory of over 17,000 designated project sites currently identified throughout the state. In 2015-16, the Center developed a new expanded online version of the GIS system that also tracks LVR projects. The system was used to generate the Program’s Annual Summary Report for 2015.
- b) **FY 2016-17:** While the “core” programming of the online GIS system has been completed, the Center will continue to work to improve and upgrade the system. Items like a “public data viewer”, more reporting functionality, and other advanced GIS functionality will be incorporated into the system. Trainings and outreach will continue to be provided for Conservation Districts. The GIS system will be used to generate the 2016 Annual Report.
- c) **FYs 2017-19:** The Center will continue to support the new GIS systems and Annual Summary Report process throughout the life of this contract. Advisory workgroups and SCC involvement will guide the transition to this new GIS system.

6) **MISCELLANEOUS:**

- a) **Advisory Workgroups:** The Center and Program have relied on advisory workgroups to make programmatic recommendations since before the Program began in 1997. These workgroups meet on an as needed basis. The Center works closely with Program staff to schedule and chair workgroup meetings. The Center will continue to coordinate with SCC staff in order to schedule these workgroup meetings as needed. Currently active workgroups include:
 - (1) **Policy and Planning:** Deals with program policies, allocations, and administration.
 - (2) **Education and Outreach:** Deals with trainings and workshops
 - (3) **Low Volume Roads:** Deals with all issues about the paved Low Volume Road part of the program, ranging from policies to allocations and administration.
 - (4) **Product and Process:** Deals with approval of products such as dust suppressants for the Dirt and Gravel Road Program.
- b) **Administrative Manual:** The Center worked closely with SCC staff to redesign, edit, and add to the Program’s Administrative Manual in 2014. The Center will continue to work with SCC staff to on corrections, additions, and clarifications to the manual.
- c) **Administrative Training:** The Center worked with the SCC to develop a one-day administrative training directed at Conservation Districts. The Center will continue to work with SCC staff to schedule additional trainings and edit the training material as needed.
- d) **Quality Assurance / Quality Control (QAQC):** The QAQC effort visits individual Conservation Districts to evaluate how they are administering the Program within their county and make recommendations for improvement. While the QAQC effort is driven by the SCC, the Center is part of the QAQC team and typically assists with visit data preparation, evaluation of field sites, and review of the field sites with Conservation District

5/10/2016

staff during the visit. The Center will continue to assist the SCC in these QAQC visits, which are expected to be held in approximately 22-23 counties each year.

7) **COMMUNICATIONS AND REPORTS:**

- i) **Newsletter:** The Center will continue to publish its quarterly newsletter to alert Program participants and various stakeholder groups about events of concern and the potential impacts on DGRP.
- ii) **Fact Sheets/Technical Bulletins:** The Center will continue to revise and publish new information bulletins on specific maintenance practices.
- iii) **Website:** Continued maintenance and expansion of the Center and Program website will occur throughout the contract year. The website typically experiences approximately 650 "hits" per month from all over the world.
- iv) **Reporting:** The Center will submit quarterly activity reports along with invoices.

8) **OTHER TASKS AS ASSIGNED AND AGREED UPON**

- a) The Center will, on occasion, provide other products and/or services to SCC under this agreement provided that funds to do so are available. It is expressly understood by both parties that this section is intended to allow flexibility in carrying out the annual work plan to address items unexpected or unforeseen at the time of adoption. In all cases, such additional products and/or services will be undertaken based on mutual agreement of SCC and the Center. This flexibility has worked well between the SCC and Center over the past decade. Office and field supplies are required for assigned projects. Purchase of field equipment, including but not limited to safety equipment, paint, flagging, survey equipment, and testing equipment may be required to fulfill contract obligations. Purchase of office equipment including but not limited to laptops, projectors, screens, cameras, copiers, software, printers, and other office or computer equipment, may be required to fulfill contract obligations.

PA State Conservation Commission - Dirt, Gravel, and Low-Volume Road Maintenance Program
Penn State Center for Dirt and Gravel Studies 5/10/2016
Summary Budget

FY 2016-17 represents "year 3" of a 5-year contract between the Center and the SCC. Projected and approved budgets for the previous two Fiscal Years are below. Approval is only being requested for FY 16-17 at this time.

ESTIMATED

5 Year Center Summary Budget Estimate, as Presented to SCC May 2014						
<i>SUMMARY BUDGET</i>	<i>projected Year 1 7/1/14 - 6/30/2015</i>	<i>projected Year 2 7/1/15 - 6/30/2016</i>	<i>projected Year 3 7/1/16 - 6/30/2017</i>	<i>projected Year 4 7/1/17 - 6/30/2018</i>	<i>projected Year 5 7/1/18 - 6/30/2019</i>	<i>Total 7/1/14 - 6/30/2019</i>
TOTAL PERSONNEL	\$ 821,040	\$ 954,512	\$ 978,719	\$ 1,003,542	\$ 1,028,995	\$ 4,786,808
TOTAL TRAVEL	\$ 161,400	\$ 161,400	\$ 161,400	\$ 161,400	\$ 161,400	\$ 807,000
TOTAL OPERATIONAL	\$ 239,560	\$ 216,088	\$ 221,881	\$ 197,058	\$ 175,605	\$ 1,050,192
TOTAL SUB-CONTRACT	\$ 150,000	\$ 40,000	\$ 10,000	\$ 10,000	\$ 6,000	\$ 216,000
TOTAL DIRECT COSTS	\$ 1,372,000	\$ 1,372,000	\$ 1,372,000	\$ 1,372,000	\$ 1,372,000	\$ 6,860,000
Admin Fee (0\$)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL COSTS	\$ 1,372,000	\$ 6,860,000				

2014 Budget Projection 5-Year Estimates



Actual

Current Actual Budgets

Current Actual Budgets	approved Year 1 7/1/14 - 6/30/2015	approved Year 2 7/1/15 - 6/30/2016	FOR SCC APPROVAL Year 3 7/1/16 - 6/30/2017	Seeking approval for "year 3", FY 2016-17 only.
SUMMARY BUDGET				
TOTAL PERSONNEL	\$ 821,040	\$ 886,655	\$ 859,124	
TOTAL TRAVEL	\$ 161,400	\$ 165,900	\$ 227,900	
TOTAL OPERATIONAL	\$ 239,560	\$ 259,445	\$ 219,976	
TOTAL SUB-CONTRACT	\$ 150,000	\$ 60,000	\$ 65,000	
TOTAL DIRECT COSTS	\$ 1,372,000	\$ 1,372,000	\$ 1,372,000	
Admin Fee (0\$)	\$ -	\$ -	\$ -	
TOTAL COSTS	\$ 1,372,000	\$ 1,372,000	\$ 1,372,000	
			FOR SCC APPROVAL	



REAP Precision Nutrient Application Equipment Certification

For more information, please refer to p24 of the REAP Guidelines

Dealer Certification

I certify that the precision application equipment described below is sold under the following conditions:

1. The equipment is capable of applying manure or other fertilizers at variable rates based on data input from maps or optical sensors.
2. The purchased components are necessary for variable rate spreading of nutrients.
3. The purchase agreement includes setup by a qualified representative of the dealership.
4. I have no conflict of interest as defined by the REAP Guidelines.

Equipment Information

Base Equipment Make, Model:

Serial Number(of the base model equipment):

check if not yet available

Please note: Only the precision ag **components** are eligible for REAP tax credits. Check all that apply:

displays, monitors, controllers

variable rate drives, hydraulic motors

GPS

metering devices

section/swath control

nozzle controls

The equipment is: New Used

Purchase Price (components): \$

Check here if equipment has already been delivered. Date of Delivery/Expected Delivery:

If possible, please itemize receipt

Dealer Representative Printed Name

for

Company Name

Dealer Representative Signature

Phone Number

Note: Used equipment sold privately must also be certified by a dealer representative or other persons approved by the Commission.

Applicant Certification

I certify that the precision fertilizer application equipment described above will be:

1. Utilized to apply nutrients at variable rates across crop fields in accordance with data input from maps or optical sensors.
2. Maintained for the designated lifespan of the equipment, which is 7 years for new equipment and 3 years for used equipment.
3. Utilized on an agricultural operation that is identified in this application.

I agree to allow inspections by an agent of the State Conservation Commission to ensure that my operation is utilizing this equipment for no till crop production. I agree to report to the Commission the number of acres on which the above equipment is operated annually, through the proscribed lifespan of the equipment. I affirm the foregoing to be true and correct, and make these statements subject to the penalties of 18 PA.C.S.A §4904, relating to unsworn falsification to authorities.

Number of acres on which this equipment will be used for precision application of nutrients annually:

NEW acres: _____

EXISTING acres: _____

Applicant Name

Applicant Signature

date



REAP Low Disturbance Residue Management/Manure Injection Equipment Purchase Certification

(To be completed for each piece of equipment purchased) - Make additional copies as necessary
 For more information, refer to REAP Guidelines (p26)

Dealer Certification

I certify that the low-disturbance manure injection equipment/low disturbance residue management equipment described below meets the standards set forth in Attachment 6 of the REAP Guidelines and is sold under the following conditions:

- 1a. For equipment that is part of a manure injection system: The equipment is capable of injecting and/or incorporating manure at a shallow depth with minimal soil disturbance.
- 1b. For residue management equipment: The equipment is designed for (and be capable of) cutting and sizing crop residue with minimal soil disturbance.
- 2. For Residue Management Equipment: The gang angles or disc angles of the equipment (fixed or adjustable) do not exceed 5 degrees.
- 3. For Residue Management Equipment: The working depth of the equipment does not exceed 4 inches.
- 4. For Residue Management Equipment: The discs/coulters are not concave.
- 5. I have no conflict of interest as defined by the REAP Guidelines (p22).

Note: Used equipment sold through a dealership or privately must also be certified by a dealer representative or other persons approved by the Commission.

Dealer Representative (print)	for	Company Name
Dealer Representative Signature		Phone Number

Equipment Information

Equipment Make, Model and Year:		
Injector	Residue Mgmt.	Seed Box
Serial Number:		Check if serial number is not yet available
The equipment is:	<input type="checkbox"/> New <input type="checkbox"/> Used	Purchase Price: \$
Order Date:	Expected Delivery Date:	
Check here if equipment has already been delivered. Date of Delivery:		

Applicant Certification

- I certify that the equipment described above will be:
- 1. Utilized in a manner consistent with the provisions of a current Conservation/Ag E&S Plan and Nutrient/Manure Management Plan.
 - 2. Adjusted to leave a minimum of 60% of crop residue on the surface.
 - 3. Not altered in any way that increases soil disturbance beyond the original design of the equipment.
 - 4. Maintained by the applicant for the designated lifespan of the equipment - 7 years for new equipment and 3 years for used equipment.
 - 5. Utilized by the applicant on an agricultural operation that is identified in this application.

I agree to allow inspections by an agent of the State Conservation Commission to ensure that my operation is utilizing this equipment for low disturbance manure incorporation. I affirm the foregoing to be true and correct, and make these statements subject to the penalties of 18 PA.C.S.A §4904, relating to unsworn falsification to authorities.

Applicant Name (print)	
Applicant Signature	Date



COMMONWEALTH OF PENNSYLVANIA
STATE CONSERVATION COMMISSION

DATE: April 28, 2016 **Agenda Item: B4a**

TO: Members
State Conservation Commission

TROUGH: Karl G. Brown, Executive Secretary
State Conservation Commission

FROM: Frank X. Schneider, Director
Nutrient & Odor Management Programs

Johan Berger, Director
Financial Administration, Policy, Certification & Conservation District Programs

SUBJECT: Proposed Nutrient Management/Manure Management Delegation Agreement
Funding Levels for the 2016-17 Fiscal Year

Action Requested

Grant approval of funding levels for participating conservation districts for Fiscal Year 2016-17 (FY2016-17) for the Act 38 Nutrient Management/Chapter 91.36 Manure Management delegation agreement. This approval is consistent with the final FY2016-17 budget of \$2,714,000 for the Nutrient Management Program, and commitment of funds from the Pennsylvania Department of Environmental Protection (DEP).

Background

In 2009, the Commission approved a process to distribute funding to counties that have accepted Level 2 delegation under the Act 38 Nutrient Management Program. This process utilized a program workload analysis considering the number of farmers in each county implementing current Act 38 and CAFO nutrient management plans. The workload analysis incorporated realistic staff resources for program implementation activities, reflecting a practical workload history for each county and subsequently producing appropriately adjusted district funding levels.

Understanding that additional financial resources would be necessary in order for conservation districts to accomplish collective Act 38 and Chapter 91.36 activities, DEP has secured funding through a grant under the Chesapeake Bay Regulatory and Accountability Program (CBRAP) in the amount of \$632,000. This funding will be combined with allocated Nutrient Management Program funds to provided resources to conservation districts for implementation of Act 38 and

Chapter 91.36 program activities under the delegation agreement. Total available funds for allocation to conservation districts under the delegation agreement would be \$2,074,000. The FY2016-17 General Fund budget proposed an appropriation of \$2,714,000 to the Nutrient Management Fund (NMF). Based on the proposed Commission approved FY2016-17 Act 38 Nutrient Management Program budget; \$2,073,000 would be allocated to conservation districts for delegated Act 38 activities.

The distribution of combined Nutrient Management Funding and CBRAP funding was determined utilizing the following factors:

1. The current Act 38 grant levels determined by a program workload analysis, and
2. A weighted evaluation of the number of animal operations and the number of farms in each county. This information is based on the current agricultural statistic data for Pennsylvania counties as published in reports developed by the National Agricultural Statistics Service (NASS).

The inclusion of animal operation and farm data with Act 38 program workload analysis accomplishes a reasonable and proportional distribution of funds to all conservation districts eligible for delegation agreement funding.

Funding under this proposal would be available only to conservation districts currently in an active Act 38 Level 2 delegation agreement with the Commission.

Proposal

The attached chart, '*Proposed* FY2016-2017 Nutrient Management/Manure Management Delegation Agreement Funding', illustrates the suggested funding allocations for conservation districts implementing Act 38 and Chapter 91.36 activities under the 5th year of the delegation agreement.

Conservation districts receiving 'zero' dollars under this proposal are currently designated as "non-delegated" Level 1 districts under the Act 38 program. If a "non-delegated" district is interested in implementing Chapter 91.36 activities, primarily outreach and education activities, the Commission and DEP would have to consider funding of a petitioning district on a 'case-by-case' basis, as resources permit.

Thank you for your consideration of the proposed delegation agreement funding levels as this will assist conservation districts, DEP and the Commission in the implementation of the nutrient and manure management programs in Pennsylvania.

Enclosure

‘Proposed’ FY2016-2017
Nutrient Management Program Delegation Agreement Funding

County	Total Grant
Adams	\$ 56,000.00
Allegheny	\$ 14,000.00
Armstrong	\$ 14,000.00
Beaver	\$ 14,000.00
Bedford	\$ 56,000.00
Berks	\$ 168,000.00
Blair	\$ 28,000.00
Bradford	\$ 112,000.00
Bucks	\$ 14,000.00
Butler	\$ 14,000.00
Cambria	\$ 14,000.00
Cameron	\$ -
Carbon	\$ -
Centre	\$ 42,000.00
Chester	\$ 42,000.00
Clarion	\$ -
Clearfield	\$ 14,000.00
Clinton	\$ 28,000.00
Columbia	\$ 14,000.00
Crawford	\$ 42,000.00
Cumberland	\$ 56,000.00
Dauphin	\$ 56,000.00
Delaware	\$ -
Elk	\$ 14,000.00
Erie	\$ 28,000.00
Fayette	\$ 28,000.00
Forest	\$ -
Franklin	\$ 112,000.00
Fulton	\$ 42,000.00
Greene	\$ 14,000.00
Huntingdon	\$ 28,000.00
Indiana	\$ 28,000.00
Jefferson	\$ 28,000.00

County	Total Grant
Juniata	\$ 112,000.00
Lackawanna	\$ -
Lancaster	\$ 448,000.00
Lawrence	\$ 14,000.00
Lebanon	\$ 154,000.00
Lehigh	\$ 28,000.00
Luzerne	\$ -
Lycoming	\$ 28,000.00
McKean	\$ 14,000.00
Mercer	\$ 28,000.00
Mifflin	\$ 56,000.00
Monroe	\$ -
Montgomery	\$ 14,000.00
Montour	\$ 14,000.00
Northampton	\$ 14,000.00
Northumberland	\$ 56,000.00
Perry	\$ 56,000.00
Pike	\$ -
Potter	\$ 28,000.00
Schuylkill	\$ 28,000.00
Snyder	\$ 98,000.00
Somerset	\$ 42,000.00
Sullivan	\$ 14,000.00
Susquehanna	\$ 14,000.00
Tioga	\$ 42,000.00
Union	\$ 56,000.00
Venango	\$ 14,000.00
Warren	\$ 14,000.00
Washington	\$ 56,000.00
Wayne	\$ 14,000.00
Westmoreland	\$ 28,000.00
Wyoming	\$ 14,000.00
York	\$ 56,000.00
Total:	\$ 2,674,000.00



COMMONWEALTH OF PENNSYLVANIA
STATE CONSERVATION COMMISSION

Agenda Item **B.4.b**

DATE: May 2, 2016
TO: Members
State Conservation Commission
FROM: Johan E. Berger
Financial Administration, Certification & Conservation District Programs
RE: 'Revised' annual work plans for educational and technical support activities.
Nutrient Management; Odor Management; Manure Hauler/Broker certification
and education programs; PAOneStop education program.

Action Requested

Approve revised annual work plans for the period of July 1, 2016 through June 30, 2017 for the continuation of existing services provided by Pennsylvania State University, College of Agricultural Sciences (PSU CAS) staff.

Background

In July 2014, the Commission entered into several three-year contracts with PSU providing continued financial support for educational and technical activities performed by PSU CAS staff for the Act 38 and Act 49 certification and education programs, administered by the Commission and the Pennsylvania Department of Agriculture (PDA). The annual work plans describe educational and technical activities to support Pennsylvania's Nutrient and Odor Management Act program (Act 38), Commercial Manure Hauler & Broker Act (Act 49), education and training support for the Pennsylvania Department of Environmental Protection (DEP) Manure Management Program (Pa Clean Streams Law, Chapter 91.36) and education and training for the Pa One Stop Farm Mapping and E&S Planning System [online planning tool].

Proposal Summary

The following summarizes education and certification program activities outlined in the respective work plans for FY2016-17. Overall, major activities for the Nutrient Management, Odor Management and Manure Hauler and Broker, and PAOneStop education programs have not changed for the upcoming program year. Work plan adjustments are noted in italics:

Nutrient Management Education & Certification:

1. Assist in the planning, development and delivery of mandatory nutrient management specialist certification and continuing education workshops, in coordination with PDA and the Commission.

2. Develop and support spreadsheet version of the nutrient management plan, nutrient balance sheet and P-Index planning tool, including instructional training on the use of these planning tools.
 - a. *The FY2016-17 work plan includes and additional activity to develop and maintain a database of detailed guidance documents to assist spreadsheet users.*
3. Assist PDA and the Commission in distribution of Nutrient Management Program information through newsletters, factsheets, technical guidance and maintenance of the Pa Nutrient Management Program website.

Odor Management Education & Certification; Animal Production Site Assessment:

1. Assist in the planning, development and delivery of mandatory odor management specialist certification and continuing education workshops, in coordination with PDA and the Commission.
2. Develop and support the Odor Site Index and Odor BMP Reference List planning tools.
3. Conduct assessments of potential large scale animal production operations for siting recommendation and identification of potential conflicts in the community as requested by animal production integrators.
 - a. *Demand for the on-site assessments by animal production integrators has necessitated the continued expansion of the number of assessments planned in FY2016-17 work plan up to 30 assessments and subsequently a proposed budget increase.*

Commercial Manure Hauler & Broker Education & Certification:

1. Assist in the planning, development and delivery of mandatory certification and continuing education workshops, in coordination with PDA and the Commission.
2. Assist PDA and the Commission in the development of educational materials, (i.e. certification workbooks) and outreach through periodic distribution of newsletters.

Manure Management Program

1. Develop the curriculum and supporting educational materials to be used by facilitators to conduct workshops to guide farmers through the process of completing a written manure management plan for their operations.
2. Provide facilitator training to cooperative extension staff, conservation districts and private sector groups who will conduct farmer plan writing workshops.
3. Develop, in consultation with DEP, updates of the Manure Management Manual rate charts and supporting worksheets as need warrants.
4. Maintain a Manure Management Education Program webpage on the Act 38 Nutrient Management Program Website.

Due to the necessity to increase onsite assessment of large scale animal production site activities in the Manure Hauler-Broker Certification/Odor Management Support/Site Assessment Program work plan, and a general increase in staffing costs at PSU, in all three education and training work plans, the annual budget for each project in the 2016-17 fiscal period (July 1, 2016 – June 30, 2017) has increased an average of 3.9%.

1. *Nutrient Management Education & Certification:* \$184,300 to \$191,500;
2. *Odor Management/ Animal Production Site Assessment/Manure Hauler Education & Certification:* \$141,000 to \$146,500;
3. *PAOneStop Education:* \$22,000 to \$22,900 *

**Note: this is an estimated increase, as a budget increase document is not available from PSU at this time.*

Recommendation

Staff recommends approval of the ‘revised’ annual work plans for the Nutrient Management Education and Animal Production Site Assessment projects and proposed funding increase for the Nutrient Management Education; the Manure Hauler Broker Certification/Odor Management Support/Site Assessment Program; and PAOneStop education work plans for FY2016-17 as allocated under the proposed Nutrient Management Program budget and contingent on the availability of funds appropriated to the Nutrient Management Fund. If upon enactment of the Governor’s ‘Proposed’ FY2016-17 General Fund, and any further adjustments are necessary to the FY2016-17 contract budgets, program staff will present a project budget adjustment to the Commission for its consideration at a later meeting.

Thank you for your consideration of these annual work plans and budget proposals. The Inter-agency and University partnership that has grown around this contract over the years has been the key to developing and implementing sound nutrient management regulatory and education standards in Pennsylvania.

Attachments

Nutrient Management Education Program

Annual Workplan
July 1, 2016 - June 30, 2017

Submitted to: Pennsylvania State Conservation Commission

Submitted by: Department of Plant Science
Penn State University
116 ASI Building
University Park, PA 16802

Project Leader: Douglas B. Beegle, Ph.D., Distinguished Professor of Agronomy

Annual Nutrient Management Education Workplan

Conduct annually the following mandatory commercial and public certification workshops and trainings:

- Two (2) Managing Manure Nutrients Workshop training courses on basic soil fertility concepts and management manure nutrients as part of nutrient management planning.
- Two (2) Plan Writing Workshop training courses to teach participants how to develop nutrient management plans and nutrient balance sheets.
- Two (2) NMP-NBS Spreadsheet Orientation computer lab trainings to introduce the program spreadsheet planning tools.
- Two (2) P Index Workshop training courses to introduce the Pennsylvania Phosphorus Index and learn how to complete the Index as part of nutrient management planning.

Conduct annually the following basic and advanced workshops and trainings to provide background training in the required competencies. Conduct and participate in additional trainings to address specific educational needs as determined by program staff based on evaluation of program needs.

- One (1) Introduction to Livestock Production Systems training course to learn about housing and manure handling and management systems for dairy, swine and poultry operations.
- Two (2) Horses 101 – Choosing Best Management Practices That Work training course to learn about equine housing and manure handling and management approaches and how to work with equine operations.

Participate annually in the planning, instruction, and support of the following mandatory commercial and public certification workshops and trainings:

- Two (2) Nutrient Management Orientation training courses to familiarize participants with the requirements within the Act 38 regulations and components of an Act 38 nutrient plan. This training is coordinated by PDA staff.

- Two (2) Plan Review Workshop training courses to teach participants how to review nutrient management plans submitted under the Act 38 regulations. This training is coordinated by PDA staff.
- Two (2) ACA & Manure Storage Workshop training courses to train participants how to identify, evaluate, and make recommendations for manure management practices related to manure storages and animal concentration areas. This training is coordinated by NRCS staff.
- Two (2) Stormwater & Soil Loss Workshop training courses to train participants to identify, evaluate, and make recommendations for critical runoff problem areas and to provide a demonstration of how PAOneStop can be used to determine soil loss for nutrient management planning. This training is coordinated by NRCS staff.

Provide planning and instructional support for locally conducted individual certification trainings, plan writing workshops, and plan implementation workshops.

- Develop training program and curriculum to facilitate locally conducted Individual Certification trainings and follow-up plan writing workshops for certified farmers.
- Develop training program and curriculum to facilitate locally conducted plan implementation training for farmers with approved nutrient management plans.

Develop and support spreadsheet versions of the Nutrient Management Plan, Nutrient Balance Sheets, and Phosphorus Index along with supporting tools and documents.

- Develop revised versions of the spreadsheets to facilitate and streamline the planning process, including data entry, and to incorporate changes to the Nutrient Management Program.
- Develop and maintain a database of detailed guidance documents to assist spreadsheet users.
- Provide NMP and NBS Spreadsheet support to nutrient management planners, manure brokers, Conservation District staff and state agency staff.
- Conduct computer lab trainings, online assistance sessions, and webinars as needed to provide instruction and support for spreadsheet tools.
- Explore and evaluate alternative planning tool options to Excel spreadsheets to better serve program planning requirements and interface with other programs.

Provide for the distribution of Nutrient Management Act information to the general public and specific audiences as needed. This will include the:

- Production and distribution annually of at least two (2) issues of the Pennsylvania Nutrient Management Program Newsletter.
- Coordinate and maintain the Pennsylvania Nutrient Management Program website.
- Reprint current Nutrient Management Act related factsheets as necessary.
- Publish new Nutrient Management Act related factsheets as necessary.

Provide relevant nutrient management educational outreach efforts determined by the Commission to be necessary to support Pennsylvania's Nutrient Management Act program.

- Provide relevant presentations and materials at the Nutrient Management Program Annual Conference.
- Provide technical and educational support to Act 49 Manure Haulers Certification Program.

- Provide technical and education support for the Phosphorus Index review and revision process.
- Provide educational support for PAOneStop.

Provide technical and educational support for the Department of Environmental Protection Manure Management Manual (MMM) education program in consultation with SCC and the Nutrient Management Educational Workgroup.

- Provide assistance to DEP and SCC in developing an effective educational strategy and workplan to facilitate compliance with the manual's written manure management plan requirement.
- Develop a workshop curriculum and supporting educational materials to assist farmers with developing a written manure management plan.
 - Provide assistance with development of the equine MMM education program.
 - Develop, in consultation with DEP, updates of the MMM rate charts and supporting worksheets as appropriate.
 - Review and update training materials as appropriate.
- Provide facilitator education for extension, conservation district, and private sector groups to provide manure management plan writing workshops for their clientele.
 - Develop an educational strategy for facilitator education for the private sector.
 - Develop an educational strategy for on-going facilitator education for public sector.
 - Participate in facilitator educational sessions as needed.
- Coordinate and maintain a MMM education program webpage on the Act 38 nutrient management program website.

Provide technical support to Commission, PDA, and DEP staff.

Provide University representation in an advisory role to the Nutrient Management Advisory Board and its associated committees and workgroups.

- Provide scientific and technical support to the Nutrient Management Advisory Board and associated subcommittees as appropriate.

Provide extension support to nutrient management related workshops and conferences.

Develop a detailed annual workplan of proposed workshop topics, educational materials, newsletters, etc., in consultation with Conservation Commission staff, prior to the beginning of the fiscal year each year of the contract.

- Submit written reports quarterly, including copies of any educational materials developed.

Plant Science (Agricultural Sciences) / The Pennsylvania State University
 Nutrient Management Education Program
 COP: State Conservation Commission
 Project Dates: 07/01/2016 - 06/30/2017

	07/01/2016 - 06/30/2017	Total
Direct Costs		
Salaries (Category I)		
<u>Beegle, Douglas Brian (Principal Investigator)</u>	0	0
<u>Martin, Gerald (Ext Assoc) (Other)</u> 100% effort	64,354	64,354
<u>Orner, Donald (Res Tech) (Other)</u> 100%	56,578	56,578
<u>Foulk, Donna Lee (Equine) (Other)</u>	2,496	2,496
Total Salaries	123,428	123,428
Wages (Category III)		
<u>Wages</u>	498	498
<u>Wages- (Workshops)</u>	1,502	1,502
Total Wages	2,000	2,000
Total Salaries and Wages	125,428	125,428
Fringe		
<u>Category I @ 37.90%</u>	46,778	46,778
<u>Category III @ 8.00%</u>	160	160
Total Fringe	46,938	46,938
Total Salaries, Wages and Fringe	172,366	172,366
Modified Total Direct Costs		
<u>Materials and Supplies</u>	6,500	6,500
<u>Materials and Supplies (Equine)</u>	2,000	2,000
<u>Travel - Domestic</u>	10,000	10,000
<u>Travel - Domestic (Equine)</u>	640	640
Total Modified Total Direct Costs	191,506	191,506
Total Direct Costs	191,506	191,506
F&A Costs		
Total Requested From Sponsor	191,506	191,506
Total Project Costs	191,506	191,506

Proposal: 34350

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Statement of Work – PDA Manure Haulers

This budget revision is a reflection of increased workload for Robert Mikesell for the following work plan objective:

“Conduct assessments of potential large-scale animal agriculture sites for the potential for conflicts in the community.”

The current work plan calls for approximately 20 assessments per year. In calendar year 2014, Dr. Mikesell completed approximately 90 assessments. Because of the popularity of this program, the increased workload is expected to continue.

The amended budget reflects an increase of Dr. Mikesell’s time devoted to this contract by 5% (from 35% to 40%) and an increase of assessments from 20 per year to 30 per year.

Animal Science (Agricultural Sciences) / The Pennsylvania State University
Delivery of Manure Hauler and Broker Certification, Odor Management Support, and Site Assessment Programs
COP: Department of Agriculture
Project Dates: 07/01/2014 - 06/30/2017

	7/1/14- 6/30/15	7/1/15- 6/30/16	7/1/16- 6/30/17	Total
Salaries (Category I)				
Meinen, Robert James ~100%	60,633	63,665	66,848	191,146
Mikesell, Robert Eugene ~40%	23,789	29,347	30,228	83,364
Total Salaries (Category I)	84,422	93,012	97,076	274,510
Total Salaries and Wages	84,422	93,012	97,076	274,510
Fringe				
Category I @ 36.50%	30,813	33,950	35,432	100,195
Total Fringe	30,813	33,950	35,432	100,195
Total Salaries, Wages and Fringe	115,235	126,962	132,508	374,705
Modified Total Direct Costs				
Materials and Supplies	5,000	5,000	5,000	15,000
In-state Travel	9,000	9,000	9,000	27,000
Total Modified Total Direct Costs	14,000	14,000	14,000	42,000
Total Direct Costs	129,235	140,962	146,508	416,705
Total Project Costs	129,235	140,962	146,508	416,705

Animal Science (Agricultural Sciences) / The Pennsylvania State University
Delivery of Manure Hauler and Broker Certification, Odor Management Support, and Site Assessment Programs
COP: Department of Agriculture
Project Dates: 07/01/2014 - 06/30/2017

	7/1/14- 6/30/15	7/1/15- 6/30/16	7/1/16- 6/30/17	Total
Salaries (Category I)				
Meinen, Robert James ~100%	0	0	0	0
Mikesell, Robert Eugene ~40%	0	4,844	4,991	9,835
Total Salaries (Category I)	0	4,844	4,991	9,835
Total Salaries and Wages	0	4,844	4,991	9,835
Fringe				
Category I @ 36.50%	0	1,768	1,821	3,589
Total Fringe	0	1,768	1,821	3,589
Total Salaries, Wages and Fringe	0	6,612	6,812	13,424
Modified Total Direct Costs				
Materials and Supplies	0	0	0	0
In-state Travel	0	0	0	0
Total Modified Total Direct Costs	0	0	0	0
Total Direct Costs	0	6,612	6,812	13,424
Total Project Costs	0	6,612	6,812	13,424



COMMONWEALTH OF PENNSYLVANIA
STATE CONSERVATION COMMISSION

DATE: April 28, 2016

Agenda Item: B4c

TO: Members
State Conservation Commission

FROM: Frank X Schneider, Director
Nutrient and Odor Management Programs

RE: Nutrient Management Program Fiscal Year 2016-17 Budget Proposal

Action Requested

Grant 'conditional' approval for the Nutrient Management Program budget for Fiscal Year 2016-2017 (FY2016-17). This approval would be contingent on final approval of the state budget consistent with the Governor's proposed FY2016-17 General Fund Budget.

Background

The Governor's proposed FY2065-17 General Fund Budget provides an appropriation to the Nutrient Management Fund of \$2,714,000, which is identical to the FY2015-16 appropriation. The attached proposed budget allocates the appropriation to the Nutrient Management Fund based on the 'proposed appropriation' to the fund and proposed 'spending authorization' of \$3,136,000 million under the Governor's proposed Budget. Program staff's proposal provides funding for the following program elements:

- a. Prioritizes funding to conservation districts recognizing their key role in carrying out the mandates of the Nutrient and Odor Management Act, known as Act 38. The proposed allocation represents a contribution from the Nutrient Management Fund towards a delegation agreement outlining combined Nutrient Management Program and Manure Management Program activities. Manure Management Program activities will be funded by Pennsylvania Department of Environmental Protection (PA DEP) under the Nutrient Management and Manure Management Program delegation agreement between conservation districts, the State Conservation Commission and the PA DEP. It is projected that the funding levels will remain the same as FY2015-16.
- b. Illustrates 'zero' funding to farmers for plan development and implementation financial assistance programs and 'zero' funding for USDA-NRCS engineering support. A special note: USDA-NRCS staff should be recognized for their continued commitment to support the Nutrient Management Program training and certification courses and field engineering support, without the need for a state contract for their assistance.

- c. Provides funding for educational and technical support, provided by the Pennsylvania State University (PSU) program partners, Dr. Douglas Beegle, Dr. Robert Mikesell and program staff from the College of Agricultural Sciences. The proposed FY2016-17 budget provides funding at the Year 3 contracted levels in the 3 year agreements. Contract budgets reflect increased education and training activities in the Manure Management Program, as was part of the previous 3 year contracts. Program staff will continue to work with DEP to acquire DEP funding resources to offset expenditures to the Nutrient Management Fund for Manure Management Program activities.
- d. Provides funding for PSU, Dr. Rick Day, for the inclusion of PaOneStop soil loss into our existing Nutrient Management Certification training on soil loss, storm water, and P-Index. An additional 2 full day training sessions are planned. The proposed FY2016-17 budget provides funding at the Year 3 contracted levels in the 3 year agreements
- e. Maintains the Commission's operational budget at current levels. Commission staff funding levels is based on anticipated expenditures for FY2016-17 projected from anticipated operational expenses and union contract personnel costs.

If at the completion of the state's budget negotiations, a final appropriation to the Nutrient Management Fund or adjustment to an approved spending authorization impacts any of the Nutrient Management Program elements (increase or decrease), program staff will bring an amended budget proposal to the Commission for its consideration.

Thank you for your consideration of this budget proposal.

Attachment

'DRAFT' 2016-17 Proposed Act 38 Nutrient Management Program Budget

	<u>2014-15 Actual</u>	<u>2015-16</u>	<u>2015-16 Actual</u>	<u>2016-17 Proposed</u>
Executive Spending Authority (EA) ¹	\$2,958,000	\$3,123,000	\$3,123,000	\$3,123,000 ¹
<u>Receipts</u>				
Balance forward ⁵	\$1,939,000 ⁵	\$1,740,700	\$1,939,000 ⁵	\$1,668,124
General fund receipt	\$2,714,000	\$2,714,000	\$2,714,000	\$2,714,000
Anticipated interest	\$0	\$0	\$0	\$0
<u>Other (penalties, fees, reimbursements)</u>	<u>\$42,000</u>	<u>\$30,000</u>	<u>\$53,000</u>	<u>\$30,000</u>
Total available	\$4,695,000	\$4,484,700	\$4,706,000	\$4,412,124
<u>Expenditures</u>				
Conservation district funding	\$2,015,300 ²	\$2,073,000	\$2,015,300	\$2,073,000 ²
Financial Assist (BMP Grants; PDIP; Agri-Link)	\$0	\$0	\$0	\$0
PSU Education & Technical Support				
Nutrient Management	\$180,500 ³	\$180,300	\$180,500	\$184,266 ³
Manure Hauler/Odor Management	\$129,300 ³	\$141,000	\$141,000	\$146,509 ³
PA OneStop Ed & Training	\$40,200	\$22,100	\$22,076	\$22,800 ³
Annual Meeting				\$0
Research	\$25,000	\$0	\$0	\$0
Personnel	\$476,000 ⁴	\$625,000	\$613,000	\$637,425 ⁴
Operational	<u>\$55,000</u> ⁴	<u>\$55,000</u>	<u>\$66,000</u>	\$59,000 ⁴
Information Technology needs		<u>\$20,600</u>		
Total expenditures 2014-15	\$2,921,300	\$3,117,000	\$3,037,876	\$3,123,000
Anticipated Balance (EA vs. Expenditures)	\$36,700	\$6,000	\$85,124	\$0
Est. Cash Balance (Receipts vs Expenditures)			\$1,668,124	\$1,289,124

¹ Fiscal year spending threshold authorized by the Governor's Office of Budget.

² Nutrient Mgmt. Fund contribution to combined Nutrient Mgmt. Program/Manure Mgmt. Program delegated activities.

³ Contract Year 3 - Certification, Technical and Training Support

⁴ 'Anticipated' expenses provided by PDA Budget Office

⁵ Estimated Cash Balance from Governor Office of Budget

Revised (4/25/16)



COMMONWEALTH OF PENNSYLVANIA
STATE CONSERVATION COMMISSION

DATE: April 26, 2016 **Agenda Item: B4d**

TO: Members
State Conservation Commission

FROM: Larry G Baum, Conservation Program Specialist
State Conservation Commission

THROUGH: Karl G. Brown, Executive Secretary
State Conservation Commission

SUBJECT: 2016 Appointments to the Nutrient Management Advisory Board

Action Requested:

Action is requested on the approval of the following appointments to the Nutrient Management Advisory Board (NMAB *or* Board). The following appointments were made by the Commission Chairperson and are being provided to the Commission for final approval:

- Kelly O'Neil (Chesapeake Bay Foundation) – *Environmentalist*, reappointment to the position
- James Harbach (Clinton County) – *Livestock (Dairy) Producer Representative*, reappointment to the position.
- Andrew Flinchbaugh. (York County) – *Livestock (Swine) Producer Representative*, new appointment to the position
- Dr. Charles A Cravotta III (USGS) – *Hydrologist*, new appointment to the position
- Chris Young (Growmark FS) – *Fertilizer Industry Representative*, new appointment to the position

Background:

The terms for the following five NMAB members expire this year.

- Kelly O'Neil (is available for reappointment) - *Environmentalist*
- James Harbach (is available for reappointment) – *Livestock (Dairy) Producer Representative*
- Chris Hoffman (not available for reappointment) – *Livestock (Swine) Producer Representative*
- Michael Langland (not available for reappointment) – *Hydrologist*
- Dean Collamer (not available for reappointment) – *Fertilizer Industry Representative*

Act 38, the Pennsylvania Nutrient and Odor Management Act, allows an individual to serve two full three year terms consecutively on the NMAB. Of the five positions on the NMAB, whose terms expire this year, there are two members (Kelly O'Neil) and (James Harbach) that are available for reappointment to the Board

Ms. Kelly O'Neil: elected to the Board in 2013

Employed by the Chesapeake Bay Foundation she has been working to strengthen Pennsylvania's agricultural production and improve water quality. Ms. O'Neil is the Agriculture Policy Specialist with the Chesapeake Bay Foundation since November 2001. She advocates for state and federal agricultural policies to protect water quality and provide farmers with technical and financial resources to maintain soil and nutrients on farmlands. She has managed a project to assist dairy farmers to match feed nutrients to production needs, to reduce manure nutrients.

A biography for Ms. O'Neil attached

Mr. James Harbach: elected to the Board in 2013

Mr. Harbach is a partner in Schrack Farms Partnership since 1993. The farm milks 950 cows with the manure run through a methane digester as well as farming 2,000 acres. The farm is both a Concentrated Animal Operation (CAO) and a Concentrated Animal Feeding Operation (CAFO).

Mr. Harbach currently serves on the Pennsylvania Farm Bureau's Dairy Committee, serves as a board member of the No-Till Alliance, serves on the Board of Director for the Clinton County Conservation District, member of the Sugar Valley Watershed Association, and member of the Clinton County Land Preservation Committee.

A biography for Mr. Harbach attached.

Act 38 requires the Commission to seek nominations from the statewide farm organizations for appointments of the *agricultural producer members* on the Board. Requests for nominations for the *Livestock (Swine) Producer, Representative* positions were sent to the Pennsylvania Farm Bureau, the PennAg Industries, the Pennsylvania State Grange, and the Pennsylvania Farmers Union.

Mr. Andrew Flinchbaugh is part of a family farm located in south central Pennsylvania near the town of Hellam. Flinchbaugh Farms is a multi-generation diversified farm focusing on the production of grain crops, contract feeder-to-finish market hogs, and tree fruits. Mr. Flinchbaugh has extensive knowledge and experience in managing all aspects of the family feeder-to-finish hog operation. Mr. Flinchbaugh has an Act 38 Nutrient Management Individual Certification that he uses to manage animal nutrients generated on the farm for the production of grain. He is actively engaged in implementing conservation measures. Andrew will be engaged as a member of the Nutrient Management Advisory Board providing practical experience, reason and sound judgment to the Board regarding agricultural nutrient and odor management issues.

A biography for Mr. Flinchbaugh attached

The Commission received the nomination of Mr. Andrew Flinchbaugh from the Pennsylvania Farm Bureau and supported by the PennAg Industries to serve as the *Livestock (Swine) Producer Representative* on the Board.

Mr. Chris Young was nominated by the PennAg Industries. Mr. Young is employed with Growmark FS as territory sales manager for Southeastern Pennsylvania and New Jersey. Mr. Young also provides support, training and complaint resolution. Mr. Young represents Growmark FS at University and Industry events.

A biography for Mr. Young attached

Dr. Charles A Cravotta III was recommended by U.S. Geological Survey. Since 1987, Dr. Cravotta has worked as a Hydrologist/Research Hydrologist, for the USGS, Pennsylvania Water Science Center. Projects focus on geochemical and hydrological processes that control water quality, particularly the sources, transport, and attenuation of metals and nutrients in watersheds and aquifers affected by mining. Results have been reported in more than 80 peer-reviewed publications and at more than 80 conferences and applied to scientific and regulatory programs for the prevention and remediation of contamination associated with mining.

A biography for Dr. Cravotta III attached

Action Needed:

The Nutrient Management Act directs the Commission's Chairman to make these appointments, with the full Commission then voting on the Chairman's appointments.

Attachments:

- Ms. Kelly O'Neil biographical information
- Mr. James Harbach biographical information
- Mr. Andrew Flinchbaugh biographical information
- Dr. Chris Young biographical information
- Dr. Charles A Cravotta III biographical information

Andrew Flinchbaugh
55 Keller Avenue
Hellam, Pa 17406

My wife Katie and I are the proud parents of three beautiful children ages ranging from four to eight. We are members of Advent Lutheran Church. I have a BS in Agri-Business Management and Minor in Animal Sciences from Penn State University. I have been involved with Pennsylvania Farm Bureau (PFB) at many levels since 2005 and currently am serving on the PFB State Board of Directors as a representative of the counties of Dauphin, Lancaster, Lebanon, and York. I've been elected by the board and am serving my second year on the Executive Committee.

I am part of a family farm located in south central Pennsylvania near the town of Hellam. Flinchbaugh Farms is a multi-generation diversified farm focusing on the production of grain crops, contract feeder-to-finish market hogs, and tree fruits. The farm business also operates an on-farm farm market where products produced on the farm as well as other locally produced products are sold. Agri-Education is an important part of the farm business which hosts a few thousand students and adults every year for farm tours, workshops, and day camps. The five family members involved in the farm business aside from myself include my parents Ritchie, and Sonia as well as my brother Mike, and sister Julie.

Management of the business is divided among the family members based on specific operations. My management responsibilities include all aspects of our feeder-to-finish hog operation and the production and marketing of our grain crop operation. These two parts of our business complement each other very well as animal nutrients produced on our farm as well as imported from other farms are a key component in our grain production. Our contact hog finishing operation has the capacity to house 1200 head of hogs. We are currently contacted with Franklin Family Farms. The farm consists of three separate finishing barns all built by my father at different times. Two barns utilize under floor manure storage with approximately 3-4 months storage capacity while the third utilizes a temporary shallow under floor storage which is emptied via gravity into an outdoor concrete manure storage structure allowing for 6 months manure storage. I have a passion for conservation and nutrient management as I have my individual nutrient management certification and have written the manure management plan for our farm. Conservation plans are kept up to date on all 1500 acres of crop land and are vital in complementing our manure management plan. I also hold a Manure Hauler 1 certification and am involved in the transportation of Layer Poultry manure for other farmers in the region.

Christopher M. Young

1001 Cherry Hill Road
Bloomsburg, PA 17815

Cell 717-769-0602

Email cyoung@growmarkfs.com

WORK HISTORY

GROWMARK FS LLC 2/03-Present

- Position: Territory Sales Manager
- Manage seed sales for Southeastern PA and New Jersey
- Provide product support and training for Sales Force
- Assist Sales efforts and Complaint Resolution
- Plant and Harvest Research and Demo Plots
- Represent GROWMARK FS at University and Industry Events

Eddie Mercer Agri-services, Inc. 7/01- 2/03

- Position: Seed Sales Manager/ Crops and Nutrient Management Consultant
- Manage corn and soybean seed sales
- Nutrient Management Planning
- Consultant for Fertilizer/ Chemical recommendations

South Mountain Creamery 10/00- 7/01

- Position: General Manager
- Oversee Construction of Building and Installation of Equipment
- Employ, train and supervise all personnel
- Implemented business plan
- Oversee day to day operation of creamery

Southern States Coop., Inc. 2/99- 10/00

- Position: Crops Field Sales Associate
- Manage Crop Center
 - Nutrient Management Planning
 - Perform field sales, credit, integrated pest management & marketing

Southern States Coop., Inc. 1/87- 2/99

- Position: Retail Manager
- Employ, train, develop, and supervise all personnel
 - Perform management function (volume building, merchandising, budgeting, accounting, & expenses)
 - Inventory control
 - Operate business with adequate return on investment
 - Direct Dairy and Fertilizer sales force & perform field sales

EDUCATION

Bachelor of Science in Agriculture Business Management
The Pennsylvania State University 1986

LICENSES & CERTIFICATES

Penn State University Alumni Association- Life Member
Eagle Scout Award- January 1979
Certified Nutrient Management Consultant in MD
Certified Crop Advisor

Charles A. Cravotta III

Research Hydrologist GS-14
<http://profile.usgs.gov/cravotta>
cravotta@usgs.gov

U.S. Geological Survey
215 Limekiln Road
New Cumberland, Pennsylvania

Education

1979 B.A. Environmental Sciences, University of Virginia
1986 M.S. Geochemistry and Mineralogy, Pennsylvania State University
1996 Ph.D. Geochemistry and Mineralogy, Pennsylvania State University

Professional Experience

1979: Geologic Technician, Virginia Water Control Board, Alexandria, VA.
1979-1983: Geologist, U.S. Geological Survey (USGS), Technical Reports Unit, Reston, VA.
1986-1987: Geochemist, IT Corporation, Monroeville, PA.
1987-present: Hydrologist/Research Hydrologist, USGS, Pennsylvania Water Science Center.
Projects focus on geochemical and hydrological processes that control water quality, particularly the sources, transport, and attenuation of metals and nutrients in watersheds and aquifers affected by mining. Results, reported in more than 80 peer-reviewed publications and at more than 80 conferences, apply to scientific and regulatory programs for the prevention and remediation of contamination associated with mining.

Professional Certification and Affiliations

1995-present: Registered Professional Geologist in Pennsylvania PG-002255-G
2001-2005: Adjunct Assistant Professor of Environmental Engineering, Pennsylvania State University
2011-present: Associate Editor, Mine Water and the Environment, International Mine Water Association

Awards and Recognition

Pennsylvania Department of Environmental Protection Award for Excellence, 1999
Department of Interior Honor Award, 2000
Schuylkill County Conservation Professional of the Year Award, 2003
Department of Interior Superior Service Award, 2005
Top 50 Most-Cited Papers in "Applied Geochemistry" (2006-2011; 2007-2012; 2008-2013)
Department of Interior Partners in Conservation Award (AMDTreat Development Team), 2013

Selected Publications

Cravotta, C.A. III (1994) [Secondary iron-sulfate minerals as sources of sulfate and acidity: The geochemical evolution of acidic ground water at a reclaimed surface coal mine in Pennsylvania](#), in Alpers, C.N., and Blowes, D.W., eds., Environmental geochemistry of sulfide oxidation: American Chemical Society Symposium Series 550, p. 345-364.
Cravotta, C.A. III (1997) [Use of stable isotopes of carbon, nitrogen, and sulfur to identify sources of nitrogen in surface waters in the lower Susquehanna River Basin, Pennsylvania](#): U.S. Geological Survey Water-Supply Paper 2497, 99 p.

- Cravotta, C.A. III (1998) [Effect of sewage sludge on formation of acidic ground water at a reclaimed coal mine](#): Ground Water, v. 36, no. 1, p. 9-19.
- Cravotta, C.A. III, and Trahan, M.K. (1999) [Limestone drains to increase pH and remove dissolved metals from acidic mine drainage](#): Applied Geochemistry, v. 14, p 581-606.
- Cravotta, C.A. III, and Bilger, M.D. (2001) [Water-quality trends for a stream draining the Southern Anthracite Field, Pennsylvania](#): Geochemistry-Exploration, Environment, Analysis, v. 1, p. 33-50.
- Williams, D.J., Bigham, J.M., Cravotta, C.A. III, Traina, S.J., Anderson, J.E., and Lyon, G. (2002) [Assessing mine drainage pH from the color and spectral reflectance of chemical precipitates](#): Applied Geochemistry, v. 17, p. 1273-1286.
- Cravotta, C.A. III (2003) [Size and performance of anoxic limestone drains to neutralize acidic mine drainage](#): Journal of Environmental Quality, v. 32, p. 1277-1289.
- Kirby, C.S., and Cravotta, C.A. III (2005) [Net alkalinity and net acidity 2: Practical considerations](#): Applied Geochemistry, v. 20, p. 1941-1964.
- Cravotta, C.A. III (2007) [Passive aerobic treatment of net-alkaline, iron-laden drainage from a flooded underground anthracite mine, Pennsylvania, USA](#): Mine Water and the Environment, v. 26, p. 128-149.
- Cravotta, C.A. III (2008) [Dissolved metals and associated constituents in abandoned coal-mine discharges, Pennsylvania, USA: 2. Geochemical controls on constituent concentrations](#): Applied Geochemistry, v. 23, p. 203-226.
- Cravotta, C.A. III, Brightbill, R.A., and Langland, M.J. (2010) [Abandoned mine drainage in the Swatara Creek Basin, Southern Anthracite Coalfield, Pennsylvania, USA--1. Streamwater-quality trends coinciding with the return of fish](#): Mine Water and the Environment, v. 29, p. 176-199.
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- Geroni, J.N., Cravotta, C.A. III, Sapsford, D.J. (2012) [Evolution of the chemistry of Fe bearing waters during CO₂ degassing](#): Applied Geochemistry, v. 27, p. 2335-2347
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Mr. James Harbach
Nominee for the Dairy Producer Representative on the NMAB
Biographical Summary

Mr. Harbach has been a partner in the Schrack Farms Partnership in Clinton County since 1993. The agricultural operation manages 950 cows, operates a methane digester, and produces crops on 2,000 acres. The operation requires a CAFO Permit and applies nutrients according to a Nutrient Management Plan.

Jim currently serves as a director for the Clinton County Conservation District and is a member of the Sugar Valley Watershed Association and the Clinton County Land Preservation Committee.



Kelly O'Neill

Kelly O'Neill has been working to strengthen Pennsylvania's agricultural production and improve water quality, as the Agriculture Policy Specialist with the Chesapeake Bay Foundation since November, 2001. She advocates for state and federal agricultural policies to protect water quality and provide farmers with technical and financial resources to maintain soil and nutrients on farm lands. She has managed a project to assist dairy farmers to match feed nutrients to production needs, to reduce manure nutrients.

Previously she was a Community and Economic Development agent with Penn State Cooperative Extension, serving Clinton, Centre, Potter and McKean Counties. From 1994-99, she advocated for federal policy reforms and promoted marketing opportunities that reward environmental stewardship and sustain family farms, with the Center for Rural Affairs in Walthill, Nebraska. As a Peace Corps Volunteer in Honduras, she organized a dairy goat cooperative that helped to significantly improve children's nutrition. Originally a native of rural, northeastern Pennsylvania where her family has been farming for over 150 years, she has a B.S. in animal science from Cornell University and an M.A. in international development from Clark University.

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COMMONWEALTH OF PENNSYLVANIA
STATE CONSERVATION COMMISSION

DATE: April 27, 2016 **Agenda Item: B4e**

TO: Members
State Conservation Commission

FROM: Frank X. Schneider
Director, Nutrient and Odor Management Programs

THROUGH: Karl G. Brown
Executive Secretary

SUBJECT: Manure Nutrient Value Update

Action Requested

Staff is seeking approval to changes made to the Penn State Agronomy Guide Average daily production and total content of manure table (Table 1.2-13).

Background

Table 1.2-13 of the Penn State Agronomy Guide (Average daily production and total content of manure) is a reference document that can be used for the development of Nutrient Management Plans (NMPs) under Act 38.

83.291 (c) (3) of the Act 38 regulations states:

(3) Test the nutrient content of manure as follows:

(i) Analytical manure testing results shall be used in the development of the plan. These manure tests must include an analysis of the percent solids, total nitrogen (as N), ammonium nitrogen (as $\text{NH}_4\text{-N}$), total phosphate (as P_2O_5) and total potash (as K_2O), for each manure group generated on the operation, and these analytical results shall be recorded in the plan.

(ii) These manure analyses shall be performed using manure sampling and chemical analysis methods which accurately represent the contents of the manure. Methods described in the *Pennsylvania Agronomy Guide* may be used to meet this requirement. Other methods shall be approved by the Commission.

(iii) For newly proposed operations, and for manure groups on existing operations where sampling and analysis are not possible prior to initial plan development, the following applies:

(A) The plan must use either standard book values, or analytical results from a similar facility as approved by the Commission or delegated conservation district.

(B) Standard book values contained in the Pennsylvania Agronomy Guide may be used to meet this requirement. Other values shall be approved by the Commission. (emphasis added)

(C) A similar facility is one that uses similar animal housing, animal groups, feeding practices and wastewater management.

Over the last several years, staff has received requests from Nutrient Management Plan (NMP) writers requesting the addition of certain animal groups that are currently not identified in Table 1.2-13, such as liquid beef manure and solid swine manure. Staff and Penn State Cooperative Extension (PSU) have been reviewing a possible update to Table 1.2-13 based on these requests

Two options were evaluated:

- 1) Base all values on the Mid-West Plan Service (MWPS) “as excreted” values
- 2) Add two identified gaps in the table (liquid beef and solid swine values)

Staff and PSU researched recommendations from the following sources:

- Mid-West Plan Service (MWPS)
- ASAE Standard D384.2 March 2005 – Manure Production and Characteristics
- Agricultural Waste Management Field Handbook (AWMFH)

Staff and PSU determined that it may be best to utilize the following:

- 1) Update and rename Table 1.2-13.
 - a. Rename to “Typical Pennsylvania Average Daily Production and Total Content of Manure”

This table continues to provide production and nutrient content information based on “typical management systems” in PA. For example many of the values in this table include typical amounts of dilution water and/or bedding. These values are useful for farmers not using the more detailed calculations of manure production found in a formal nutrient management plan. Also, these nutrient contents could be used where book values of nutrient content are allowed in regulations
 - b. Updated to include the two identified gaps (liquid beef and solid swine)
 - c. Reviewed, with species specialists, that the daily production and manure nutrient contents still consist with current Pennsylvania agriculture.
 - d. Other than the updates described above the table remained essentially the same as in previous Agronomy Guides.
- 2) Create a table, to be included in the standard Act 38 NMP spreadsheet, that includes the Mid-West Plan Services (MWPS) “as excreted” nutrient concentrations and reference in the Act 38 technical guidance.
 - a. This table would be used when developing a NMP and the “as excreted” production data and nutrient concentrations would be a better estimate of the actual amount of manure produced and manure nutrient content, versus Table 1.2-13.
 - b. Using the “as excreted” production data will allow more site specific estimates of manure production because it eliminates assumptions that are implicit in the “Typical management” used for the values in Table

1.2-13. Also, this will reduce errors where the assumptions in Table 1.2-13 are not correctly accounted for. For example, in Table 1.2-13 for broilers, a “typical” amount of litter is assumed in the production figures. If a planner does not recognize that and includes the actual litter used in manure production calculation, there could be a double accounting for litter. Second, the “as excreted” nutrient content in the new table will better represent the nutrient content in manure deposited on pastures than the values in Table 1.2-13 which might include dilution and/or bedding which is not appropriate for direct deposit on pastures.

- c. As appropriate, additional animal types (eg. Emus, llamas, etc.) not currently in the Agronomy Guide table could be added to this table. Currently these are handled on an individual case by case basis.
- d. The information in this table would be programmed into the Nutrient Management Planning Spreadsheet updating the current values in the spreadsheet and thus would not require any procedural changes for nutrient management planners.

Again, it must be noted, that the updated Table 1.2-13 and the identified second table for the NMP spreadsheet would only be relevant to new animal groups or new facilities, as 83.291 of the regulations requires yearly testing of manure groups and yearly records of actual manure produced.

Attached is the revised Table 1.2-13.

Table 1.2-13. Typical Pennsylvania average daily production and total content of manure.

Animal type	Daily production	Manure % dry matter	Analysis units	N	P ₂ O ₅	K ₂ O	Comments
Dairy							
Lactating cow, liquid	13 gal/AU/day	<5	lb/1,000 gal	28	13	25	Production does not include dilution. Analysis includes dilution to approximately 5% solids.
Dry cow, liquid	6 gal/AU/day	<5	lb/1,000gal	28	13	25	
Lactating cow, solid	111 lb/AU/day	12	lb/ton	10	4	8	No bedding included in production or analysis figures. Use these analyses for estimating nutrients deposited on pastures by dairy cows, dairy dry cattle, and dairy young cattle.
Dry cow, solid	51 lb/AU/day		lb/ton	9	3	7	
Heifer	60 lb/AU/day		lb/ton	10	3	7	
Calf	80 lb/AU/day		lb/ton	10	3	4	
Veal	7 gal/AU/day	2	lb/1,000 gal	19	13	25	Production does not include dilution. Analysis includes dilution.
Beef							
Cow, solid	90 lb/AU/day	12	lb/ton	11	7	10	No bedding or dilution included in production or analysis figures. Use these analyses for estimating nutrients deposited on pastures by a beef cow and calf, beef calves, and steers.
Cow, liquid	11 gal/AU/day		lb/1,000 gal	32	16	27	
Calf	106 lb/AU/day	12	lb/ton	11	7	10	
Finishing cattle, solid	49 lb/AU/day	8	lb/ton	14	5	8	
Finishing cattle, liquid	6 gal/AU/day		lb/1,000 gal	62	19	39	
Swine							
Farrow to wean (includes sows), liquid	11 gal/AU/day	2.5	lb/1,000 gal	18	18	11	Production includes a typical amount of in-barn dilution water but not rainfall for an outdoor storage, except for farrow to wean which also includes rainfall. Analysis includes dilution to approximately the % dry matter indicated.
Nursery, liquid	14 gal/AU/day	1.5	lb/1,000 gal	19	8	14	
Wean to finish, liquid	5.5 gal/AU/day	4	lb/1,000 gal	37	23	21	
Grow-finish, liquid	7 gal/AU/day	4	lb/1,000 gal	31	24	22	
Farrow to wean (includes sows), solid	47 lb/AU/day		lb/ton	19	13	15	No bedding included in production or analysis figures. Use these analyses for estimating nutrients deposited on pastures by swine.
Nursery, solid	75 lb/AU/day		lb/ton	20	7	13	
Wean to finish, solid	49 lb/AU/day		lb/ton	23	8	11	
Grow-finish, solid	49 lb/AU/day		lb/ton	23	8	11	

Animal type	Daily production	Manure % dry matter	Analysis units	N	P ₂ O ₅	K ₂ O	Comments
Sheep/Goats	40 lb/AU/day	25	lb/ton	23	8	20	No bedding included in production or analysis figures. Use these analyses for estimating nutrients deposited on pastures by sheep and goats.
Horse	55 lb/AU/day	20	lb/ton	12	5	9	No bedding included in production or analysis figures. Use these analyses for estimating nutrients deposited on pastures by horses.
Poultry							
Layer (364 d) ¹	26 lb/AU/day	41	lb/ton	37	55	31	
Pullet (126 d) ¹	48 lb/AU/day	35	lb/ton	43	46	26	
Light broiler (44 d) ¹	22 lb/AU/day	66	lb/ton	79	62	42	Production and analysis figures include litter.
Heavy broiler (57 d) ¹	20 lb/AU/day	75	lb/ton	66	63	47	Production and analysis figures include litter.
Turkey (tom) (123 d) ¹	13 lb/AU/day	60	lb/ton	52	76	42	Production and analysis figures include litter.
Turkey (hen) (88 d) ¹	11 lb/AU/day	65	lb/ton	73	88	46	Production and analysis figures include litter.
Duck (dry)	110 lb/AU/day	27	lb/ton	21	26	15	No bedding included in production or analysis figures.
Duck (wet)	13 gal/AU/day	5	lb/1000 gal	33	23	16	Production does not include dilution. Analysis includes dilution to approximately 5% solids.

Note: When possible, have manure analyzed. Actual values may vary over 100 percent from averages in the table.

1. Typical production days.



**COMMONWEALTH OF PENNSYLVANIA
STATE CONSERVATION COMMISSION**

DATE: April 25, 2016

TO: State Conservation Commission Members

FROM: Frank X. Schneider, Director
Nutrient and Odor Management Programs

THROUGH: Karl G. Brown
Executive Secretary

RE: Nutrient and Odor Management Programs Report

The Nutrient and Odor Management Program Staff of the State Conservation Commission offer the following report of measurable results for the time period of March/April 2016.

For the months of March and April 2016, staff and delegated conservation districts have:

1. Odor Management Plans:
 - a. 40 OMPs in the review process
 - b. 29 OMPs approved
 - c. 2 OMP approvals rescinded
2. Worked on recording and filing the 2016 Odor Management Self Certifications. A separate written report is available.
3. Conducted four (4) county conservation district program evaluations.
4. Managing nine (9) enforcement or compliance actions, currently in various stages of the compliance process.
5. Worked with legal counsel on four (4) separate Environmental Hearing Board cases.
6. Held the 1st meeting of the delegation workgroup. Scheduled and developed materials for the 2nd meeting of the workgroup.
7. Coordinated with DEP Solid Waste Program on developing unified guidance on how to handle food processing residuals in Act 38 and manure management in general
8. Reviewed the USDA proposed organics guidance for outdoor access for animals. Developed a workgroup to submit comments within the timeframe allowed.



**COMMONWEALTH OF PENNSYLVANIA
STATE CONSERVATION COMMISSION**

DATE: April 15, 2016

TO: Members
State Conservation Commission

FROM: Frank X. Schneider, Director
Nutrient and Odor Management Programs

SUBJECT: Calendar Year 2015 Nutrient Management Plan Data

Attached is the most recent Nutrient Management Plan (NMP) approval data for Calendar year 2015. I would like to thank Tom Juengst from DEP for developing this report based on the data submitted by the delegated conservation districts.

The report shows that there are a total of 1,934 Pennsylvania farms that have NMPs approved for their operations. These approved operations have a net total of 473,996 acres under plan, which does not include the acres of importing farms with developed Nutrient Balance Sheets (NBS).

The last report given to the commission was on April 21, 2015. This report, when compared to the 2014 report, shows an increase of 4 operations with approved NMPs, and a decrease of 1,121 planned acres on these farms.

ATTACHMENT

NUTRIENT MANAGEMENT PROGRAM
PLAN COUNT - DECEMBER 2015

County	CAOs	Acres	VAOs	Acres
ADAMS	29	9,774	13	4,312
ALLEGHENY	3	32	5	3,264
ARMSTRONG	1	13	24	7,730
BEAVER	0	0	3	532
BEDFORD	4	549	9	1,798
BERKS	57	4,513	36	8,358
BEAVER	0	0	34	17,557
BRADFORD	8	3,284	26	7,648
BUCKS	10	596	9	2,315
BUTLER	0	0	25	6,510
CAMBRIA	4	29	1	123
CENTRE	16	3,793	10	4,493
CHESTER	12	737	13	5,506
CLARION	1	7	0	0
CLEARFIELD	1	57	7	1,512
CLINTON	11	422	4	3,298
COLUMBIA	6	1,500	4	3,380
CRAWFORD	1	438	35	20,041
CUMBERLAND	23	1,321	72	21,665
DAUPHIN	25	3,806	16	4,525
ERIE	1	213	21	8,899
FAYETTE	1	62	12	5,200
FRANKLIN	40	4,407	24	17,397
FULTON	14	868	33	13,640
GREENE	1	-	7	1,899
HUNTINGDON	4	830	22	13,666
INDIANA	6	57	39	14,158
JEFFERSON	6	140	8	2,324
JUNIATA	58	2,868	40	11,174
LANCASTER	265	35,117	45	9,609
LAWRENCE	2	260	4	1,222
LEBANON	87	5,015	26	6,578
LEHIGH	5	9,247	24	7,407
LUZERNE	3	310	0	0
LYCOMING	11	1,254	8	2,017
BUTLER	0	0	7	1,738
MERCER	2	27	0	0
MIFFLIN	23	1,864	17	4,230
MONROE	2	22	0	0
MONTGOMERY	4	94	3	175
MONTOUR	10	248	1	30
NORTHAMPTON	1	61	4	1,822
NORTHUMBERLAND	13	615	10	5,264
PERRY	39	3,157	33	11,210
PIKE	2	13	0	0
POTTER	0	0	17	12,417
SCHUYLKILL	21	1,097	11	3,711
SNYDER	64	4,140	16	6,584
SOMERSET	1	188	51	27,145
SULLIVAN	2	501	0	0
SUSQUEHANNA	1	12	19	6,635
TIOGA	9	3,524	9	2,515
UNION	26	1,335	14	4,514
VENANGO	0	0	2	191
WARREN	0	0	1	89
WASHINGTON	1	26	33	9,296
WAYNE	0	0	10	3,294
WESTMORELAND	1	33	48	21,004
WYOMING	1	89	0	0
YORK	24	1,949	6	1,860
Totals	963	110,516	971	363,480



**COMMONWEALTH OF PENNSYLVANIA
STATE CONSERVATION COMMISSION**

DATE: April 8, 2016

TO: Members
State Conservation Commission

FROM: Frank X. Schneider, Director
Nutrient and Odor Management Programs

Tom Juengst
DEP Bureau of Clean Water

SUBJECT: Calendar Year 2015 Chapter 91 Activities

Below is a summary of the Chapter 91 education and outreach activities performed by delegated county conservation districts during calendar year 2015.

In July 2013, it was reported to the SCC, on the new Attachment G (Manure Management Reporting) quarterly report forms that will be utilized by conservation districts in relationship to their Nutrient and Manure Management Delegation Agreements.

Attachment G is utilized by DEP to collect data on the Manure Management (Chapter 91.36) requirements that were added to the Nutrient Management and Manure Management Delegation Agreements in July 2012.

Attachment G includes the collection of information as it pertains to manure management outreach, training, and assistance.

In calendar year 2015, delegated conservation districts performed the following activities in regards to Manure Management.

- 1,862 outreach events
- 9,347 outreach contacts
- 351 consultant contacts
- 248 complaints processed
- 102 instances of compliance needed
- 31 compliance issues referred to DEP



COMMONWEALTH OF PENNSYLVANIA
STATE CONSERVATION COMMISSION

DATE: April 25, 2016 ITEM:
TO: Members
State Conservation Commission
FROM: Karl J. Dymond
State Conservation Commission *KJ Dymond*
SUBJECT: May 2016 Status Report on F Plan Reviews

Detailed Report of Recent Odor Management Plan Actions

In accordance with Commission policy, attached is the Odor Management Plans (OMPs) actions report for your review. No formal action is needed on this report unless the Commission would choose to revise any of the plan actions shown on this list at this time. This recent plan actions report details the OMPs that have been acted on by the Commission and the Commission’s Executive Secretary since the last program status report provided to the Commission at the February 2016 Commission meeting.

Program Statistics

Below are the overall program statistics relating to the Commission’s Odor Management Program, representing the activities of the program from its inception in March of 2009, to April 25, 2016.

The table below summarizes approved plans grouped by the Nutrient Management Program Coordinator Areas and by calendar year.

	W	Central	NE	SE	Annual Totals
**2009	4	3	6	28	41
**2010	2	4	8	26	40
**2011	6	7	11	17	41
*2012	10	2	16	18	46
**2013	5	6	14	42	67
**2014	7	8	18	44	77
2015	2	15	15	62	94
2016	1	6	8	23	
Totals	37	51	96	260	Grand Total: 444

Note that 2016 YTD is through April 25, 2016

***Note the change in approved plan numbers is due to rescinded OMPs*

As of April 25, 2016, five hundred OMPs have been **submitted**, four hundred forty four have been **approved**, eight plans have been **denied**, thirteen plans have been **withdrawn** without action taken, twenty four plans were **rescinded** and eleven plans are going through the **plan review process**. Note: of the 500 total plans, 92 of those plans are amendments of previously approved plans.

OMP Status Report

<i>Action</i>	<i>OMP Name</i>	<i>County</i>	<i>Municipality</i>	<i>Species</i>	<i>AEUs</i>	<i>OSI Score</i>	<i>Status</i>	<i>Action By</i>	<i>Amend</i>
<i>CAO/CAFO</i>									
2/23/2016	Martin, Larry Dean	Berks	Tulpehocken Twp	Broilers	246.33	111	Rescinded PI	SCC	
2/23/2016	Walmoore Holsteins, Inc - Unit 2	Chester	Londonderry Twp	Cattle	262.5	34.6	Approved	Exec. Sec.	B
3/7/2016	Buch, David	Lancaster	W Earl Twp	Broilers	142.93	25.2	Approved	Exec. Sec.	
3/7/2016	Star Rock Dairy, Inc & Star Rock Farms, LL	York	Chanceford Twp	Cattle	272.25	25.2	Approved	Exec. Sec.	
3/7/2016	Puderbaugh, Dean	Columbia	Pine Twp	Swine	713.42	32.4	Rescinded PI	Exec. Sec.	
3/7/2016	Bellaire Farms, LLC	Lancaster	Mt Joy Twp	Broilers	262.55	38.25	Approved	Exec. Sec.	
3/7/2016	Rohrer Farms, LLC - Organic Farm	Lancaster	Penn Twp	Multi	423.6	34.9	Approved	Exec. Sec.	
3/11/2016	Penn England, LLC	Blair	Woodbury Twp	Cattle	0	47.0	Approved	Exec. Sec.	
3/11/2016	Snyder, Linford - Covered Bridge Rd Farm	Schuylkill	Washington Twp	Pullets	346.6	41.9	Approved	Exec. Sec.	
3/16/2016	Roaring Creek Egg Farms LLC	Columbia	Cleveland Twp	Layers	1833.3	31.4	Approved	Exec. Sec.	
3/16/2016	Lehman, Curtis	Berks	Upper Tulpehocken T	Broilers	0	4.7	Approved	Exec. Sec.	
3/16/2016	Spring Valley Dairy LLC	Lancaster	Ralpho Twp	Pullets	140.8	23.0	Approved	Exec. Sec.	
3/18/2016	Hillcrest Saylor Dairy Farms, LLC - Home F	Somerset	Middlecreek Twp	Cattle	315.0	35.1	Approved	Exec. Sec.	A
3/24/2016	Belview Valley Farms, LLC	York	Peach Bottom Twp	Swine	310.11	35.6	Approved	Exec. Sec.	
3/24/2016	Graywood Farms, LLC	Lancaster	Fulton Twp	Cattle	0	13.7	Approved	Exec. Sec.	
3/24/2016	Horning, Edwin Jr	Lancaster	Ephrata Twp	Broilers	142.93	25.6	Approved	Exec. Sec.	
3/24/2016	Zook, John	Centre	Haines Twp	Veal	76.22	51.8	Approved	Exec. Sec.	
3/24/2016	Henry, Donald	Dauphin	Mifflin Twp	Layers	4.74	12.75	Approved	Exec. Sec.	
3/28/2016	Yoder, Joseph	Centre	Haines Twp	Veal	53.35	44.9	Approved	Exec. Sec.	
3/31/2016	Gorrell Dairy, LLC - Home Farm	Bradford	Smithfield Twp	Cattle	147.0	21.9	Approved	Exec. Sec.	
3/31/2016	Martin, Robert S - Ridge Valley Farm III	Snyder	Spring Twp	Turkey	453.43	36.3	Approved	Exec. Sec.	

<i>Action</i>	<i>OMP Name</i>	<i>County</i>	<i>Municipality</i>	<i>Species</i>	<i>AEUs</i>	<i>OSI Score</i>	<i>Status</i>	<i>Action By</i>	<i>Amend</i>
4/4/2016	Star Rock Dairy, Inc – Witmer Road Farm	Lancaster	Manor Twp	Cattle	0	17.6	Approved	Exec. Sec.	
4/7/2016	Kauffman, Benjamin E, Jr	Dauphin	Gratz Borough	Layers	38	72.0	Approved	Exec. Sec.	
4/11/2016	Cotner Farms Inc	Northumberland	Rush Twp	Layers	1985.0	25.7	Approved	Exec. Sec.	B
4/11/2016	Mahosky Farms LLC	Tioga	Union Twp	Swine	713.42	49.2	Approved	Exec. Sec.	
4/21/2016	Shady Brae Farms, Inc – Lancaster Junctio	Lancaster	Penn Twp	Layers	1386.0	41.0	Approved	Exec. Sec.	
4/21/2016	Flint Road Farm, LLC	Juniata	Walker Twp	Broilers	143.2	40.3	Approved	Exec. Sec.	
4/21/2016	Smith Station Acres, LLC	York	Heidelberg Twp	Turkey	181.4	89.5	Approved	Exec. Sec.	
4/21/2016	Nolt, Dwayne	Lebanon	Jackson Twp	Swine	288.0	60.1	Approved	Exec. Sec.	
4/21/2016	Critter Hill Farm LLC	Adams	Butler Twp	Multi	0	20.1	Approved	Exec. Sec.	A
4/21/2016	Showers, Jim	Union	White Deer Twp	Multi	384.34	78.2	Approved	Exec. Sec.	A



COMMONWEALTH OF PENNSYLVANIA
STATE CONSERVATION COMMISSION

DATE: May 3, 2016
TO: State Conservation Commission
FROM: Johan E. Berger
Financial, Certification and Conservation District Programs
SUBJ: 2016 “To-date” Program Accomplishments: Nutrient and Odor Management Specialist; Commercial Manure Hauler & Broker Certification programs

Certification Program Summary

State Conservation Commission staff facilitate training and certification programs for persons interested in ‘commercial’ or ‘public’ certification in order to develop or review odor management or nutrient management plans under the Act 38 *Facility Odor Management or Nutrient Management* programs. Training is also facilitated for commercial manure haulers and brokers seeking certification under the Act 49 *Commercial Manure Hauler and Broker Certification* program.

Program Accomplishments (January 1, 2016 to April 30, 2016)

1. The Winter/Spring certification cycle for the Nutrient Management Specialist certification program began in March 2016. Twenty-four (24) individuals are currently participating in the certification coursework. The spring certification cycle for the Commercial Manure Hauler and Broker certification program also began in March 2016. Twenty-five (25) haulers/brokers completed their required coursework and completed certification requirements.
 2. Completed nine (9) reviews of nutrient management plan reviews for certification requirements. *Note: This is an internal review conducted on NMPs under review by public review specialists seeking final certification.*
 3. Issued the following licenses to individuals who successfully completed certification and/or continuing education requirements for license renewals:
 - a. Nutrient Management and Odor Management Specialists:14
 - b. Commercial Manure Haulers and Brokers:.....95
- Note: Total licenses monitored and maintained by Commission staff on behalf of PDA:*
- a. Nutrient Management Specialists - 289
 - b. Manure Haulers and Brokers - 677
 - c. Odor Management Specialists- 33
4. Approved credits for eligible continuing education programs scheduled up to June 30, 2016:
 - a. Nutrient Management Specialist certification: 22 events
 - b. Commercial Manure Hauler and Broker certification:8 events

Note: Most of these events are occurring during the months of February, March & April 2016.

5. Three compliance investigations under the Commercial Manure Hauler and Broker Certification program remain open pending completion of information collection and assessment.
6. One compliance investigation under the Nutrient Management Specialist and Odor Management Specialist certification program remain open pending completion of information collection and assessment.



COMMONWEALTH OF PENNSYLVANIA
STATE CONSERVATION COMMISSION

DATE: April 26, 2016
TO: State Conservation Commission
FROM: Joel D. Semke
REAP Coordinator
SUBJ: FY 2015 REAP Summary

REAP Program Summary

The deadline for FY 2015 REAP Applications was April 22, 2016. We received a total of 344 applications – 105 since March 1, 2016. Approximately 20 of these applications will be rolled over to the next round of REAP since we received more applications than could be covered with REAP’s \$10 million allocation. Below is (1.) a summary of FY 2015 round of REAP, and (2) a summary of REAP from January 1, 2016 to present.

(1.) FY 2015

2014-15	Total Cost	Other Public Funding	Reap Request Amount	Credit Granted Amount
Total	\$24,933,396.89	\$3,891,425.03	\$10,436,897	\$5,993,181

REAP Request – project types

Proposed – \$5.6 million
Completed Projects - \$4.8 million

No-Till Equipment - \$5.1 million
Structural BMPs - \$4.3 million
Plans (Ag E&S, Conservation, Manure Management, Nutrient Management) - \$162,500
Low Disturbance Residue Management Equipment - \$660,000
Precision Ag Equipment - \$206,000 (19 applicants)

(2.) Jan 01, 2016 – April, 2016

1. Tax Credits issued to applicants for completed, eligible projects *\$6.7 million*
2. Number of BMPs completed associated with issued tax credits..... *209 projects*
3. Number of tax credit ‘sales’ completed *26 sale transactions*
(Totaling \$0.51 million)
4. Number of site inspections conducted on completed projects *7*
(Includes roofed BMPs, equipment [no-till & low disturbance residual management] and waste storage structures.)



COMMONWEALTH OF PENNSYLVANIA
STATE CONSERVATION COMMISSION

Agenda Item: C.1.e

Date: April 26, 2016

To: State Conservation Commission

From: Roy Richardson, Dirt and Gravel Roads Program Coordinator

Through: Karl G. Brown, Executive Secretary

RE: Dirt, Gravel, Low Volume Road Activities

QAQC Visits - Staff has completed 9 Quality Assurance/Quality Control (QAQC) visits to date in 2016. For the remainder of 2016, 10 more visits are scheduled. Staff is on target for meeting the goal of visiting every participating county on a three year cycle.

Annual Workshop – The 2016 annual workshop will be held in York, Pa this fall. Commission and Center staff are preparing for the workshop. Preparation includes finding worksites to tour, completing a demonstration project, locating a facility, and developing a classroom agenda.

Tentative plans are to hold the 2017 workshop in Tioga County.

Education – Two Environmentally Sensitive Maintenance Trainings (ESM) was held in the first quarter of 2016. A total of 11 are scheduled so far for 2016.

A three day “mini” boot camp is scheduled for May 3, 4, 5. Topics include administrative training, GIS training, and road diagnostics. This new training opportunity is primarily targeted for new conservation district employees that will administer the DGLVR Program.

Penn State College of Agriculture will be offering a new course, ERM/FOR 497, “Rural Road Ecology and Maintenance”. This course will be taught by Center staff.

Annual Summary Report - Completed the annual summary report which will be submitted to the house and senate transportation committees.

Miscellaneous outreach efforts –

- Presentation to Pa Fish and Boat cadet class
- LVR roundtable held for Southeast Pa conservation districts
- “Help desk” for conservation districts at the February 9th PACD meeting
- Presentation on DSA at PennDOT region 3 meeting
- Presentation at northeast PA contractors workshop

Technical Assists – Technical assists to 16 counties, multiple worksites in each county. Center staff conducted 12 Quarry visits to collect DSA samples for independent lab testing.

Driving Surface Aggregate (DSA) - Worked in conjunction with center staff, Policy and planning workgroup, Pennsylvania Aggregate and concrete Institute, and PennDOT to develop a new DSA standard and specification for use in the program.

Allocation of funds - Met with Policy and Planning, and Low Volume Roads workgroups to review 2015 projects, discuss allocation formulas, and make funding recommendations for FY 2016-17.

Product and Process workgroup - This workgroup met several times to review and refine the product approval process. A presentation on the product approval process will be made at the July meeting.

Research – Center staff is conducting research in several areas including dust quantification, sediment quantification, and DSA maintenance.



BUILDING BRIDGES

Farmers* Municipalities* Citizens
Conservation Districts* Agribusiness

To: Members March 18, 2016

From: State Conservation Commission
Beth Futrick
Agriculture/Public Liaison

Through: Karl G. Brown, Executive Secretary
State Conservation Commission

Re: Ombudsman Program Update – Southern Alleghenies Region

Activities: December 18, 2015 – March 18, 2016

- Managing a PA Dept. of Ag-Specialty Crop Block Grant
 - Prepared and submitted final report and last funding request
- Working with Blair County MS4 Workgroup and administering NFWF Grant - This grant will help Blair County's municipalities develop and implement green infrastructure to meet goals in their watershed plan.
 - Organizing the construction of green infrastructure (GI) demonstration sites. We are working with the municipalities in Blair County to install GI sites. The NFWF grant funds materials, engineering services, and ed./outreach signage and the municipalities public works staff provide man-power and equipment
 - Plan for construction at B-A Community park – bio-swale and rain garden
 - Including two educational activities
 - Buffer planting with Jody and the B-A JRHS science class
 - Municipality workshop on storm-water planning

Meetings/Trainings/Events

- Preparing for Farmer workshop on February 8 – Chris Wise- Friends Farm, is the main speaker
- Preparing for Farmer workshop on February 22 – Scott Farabaugh- Blue Goose Farm, is the main speaker
- Preparing for a Municipal workshop on manure management regulations on February 25.

Conflict Issues/Municipal Assistance –

- Lycoming County- fly complaint
- Clinton County – assisted County Commissioner with fly management outreach information
- Bedford County- fly complaint
- Blair County- Ordinance review

Reports & Grant Applications

- Preparing PDA- Specialty Crop Block Grant's financial report.
- Submitted a funding request form for NFWF grant
- Preparing DCED-ACE grant application for District Property



BUILDING BRIDGES

Farmers* Municipalities* Citizens
Conservation Districts* Agribusiness

To: Members April 27, 2016

From: State Conservation Commission
Beth Futrick
Agriculture/Public Liaison

Through: Karl G. Brown, Executive Secretary
State Conservation Commission

Re: Ombudsman Program Update – Southern Alleghenies Region

Activities: March 18, 2016 – April 27, 2016

- Working with Blair County MS4 Workgroup and administering NFWF Grant - This grant will help Blair County's municipalities develop and implement green infrastructure to meet goals in their watershed plan. Blair County MS4 Workgroup and administering NFWF Grant
 - Plan for construction at B-A Community park – bio-swale and rain garden
 - Buffer planting at BA Community Park with BA- junior and senior students
 - Site visit with West PA Conservancy (in-kind- purchase of trees)
 - Working with IRC to supply mulch
 - Plan for construction at Tyrone VFW – rain garden
 - Preparing for a pasture-walk to be held this spring in Bedford County

Meetings/Trainings/Events

- Municipal training on Role of PA Ag Ombudsman – Northumberland County on March 1
- Preparing for a Municipal/Contractor/Landscaper workshop on stormwater control and properly installing green infrastructure on April 22.
- Preparing for Riparian Buffer project at B-A Community Park

Conflict Issues/Municipal Assistance –

- Lycoming County- fly complaint
- Clinton County – assisted County Commissioner with fly management outreach information
- Bedford County- fly complaint
- Blair County- Ordinance review
- Clinton County -Ordinance review
- Montour County- Darkling Beetle infestation complaint

Reports & Grant Applications

- Preparing PDA- Specialty Crop Block Grant's financial report.
- Submitted a funding request form for NFWF grant
- Preparing DCED-ACE grant application for District Property



BUILDING BRIDGES

Farmers * Municipalities * Citizens
Conservation Districts * Agribusiness

To: Members
State Conservation Commission

From: Shelly Dehoff
Agriculture/Public Liaison

Through: Karl G. Brown, Executive Secretary
State Conservation Commission

Re: Agricultural Ombudsman Program Update

May 10, 2016

Activities: Since mid-March 2016, I have taken part or assisted in a number of events, including the following:

- Continuing to plan Ag Week 2016
- Attended Bay Conservation District and Agency Staff conference at Bucknell
- assisting the Soil and Water Conservation Society with a brochure
- assisted with a Manure Mgmt Plan Writing workshop
- attended farmer education meeting on farm safety sponsored by TeamAg
- attended SouthCentral PA regional Homeland Security Conference
- performed an Ag Preservation verification visit for Lancaster Ag Preserve Board
- performed 2 FRPP visits in York County with Ag Preserve staff
- participated in selection of college scholarships to be awarded to deserving candidates, through LCCD
- met with leadership from new Bay Program office regarding how Ombudsman Program can assist with outreach publications or education in future
- Serve as Secretary for Coalition for Smart Growth Board and Exec Comm
- Serve as Chair of the South Central Task Force Agriculture Subcommittee
- Attended and assisted at Lancaster Co. Agriculture Council meeting

Local Government Interaction: I have been asked to provide educational input regarding agriculture:

Clinton Co—provided Beth Futrick with input for municipal ordinance issues

Columbia Co—received call from Zoning Officer requesting educational input as she is reviewing a Comprehensive Plan for a neighboring municipality

Columbia Co—received call from farmer concerned with proposed ordinance changes

Moderation or Liaison Activities: I have been asked to provide moderation or liaison assistance with a particular situation:

Lancaster Co—received request for input from neighbors to expanding quarry

Research and Education Activities:

Dauphin Co- received inquiry from Township Manager about fly control information which they could publish in newsletter

Northumberland Co— received call from poultry grower concerned with neighborhood roaming chickens; interested in what options there are

Franklin Co—received call from person wanting to start custom manure hauling business; person wanted to be sure he had all regulations met, and wanted to provide complete service/knowledge to future customers

Fly Complaint Response Coordination: I have taken complaints or am coordinating fly-related issues in:

Chester Co—attended meeting facilitated by Senator of neighborhood affected by phorid flies

York Co—notified of flies and odor concerns

Dauphin Co—notified of fly complaint that is a continuation from last year

Pennsylvania in the Balance Conference
March 1-3, 2016
Summary Report

Executive Summary

On March 1-3, 2016, the College of Agricultural Sciences together with other partners hosted the *Pennsylvania in the Balance Conference* in Hershey, PA. Over 120 diverse stakeholders attended the event, which provided a collaborative forum where motivated leaders in agriculture and the environment identified new, innovative solutions that can help ensure vibrant, productive agriculture while meeting water quality goals for PA's rivers and streams and the Chesapeake Bay.

At the end of three days, clear themes and initial recommendations emerged which, if seized upon, can form the basis of a new consensus based, collaborative strategy to ensure profitable and productive agriculture while achieving water quality goals. *This strategy embraces agriculture and its ingrained culture of stewardship, and looks for leadership from agriculture to be the solution to clean water.*

Themes identified at *Pennsylvania in the Balance* include:

- 1. Embrace a Culture of Stewardship.** Agriculture has high standards for conservation, with roots in a multigenerational culture of stewardship. Farmers desire to be the solution for clean water, and do not condone poor managers who are causing water quality problems. Programs to recognize and reward farmers meeting high conservation standards have strong appeal and may help raise the conservation bar.
- 2. Employ Effective Targeting.** Targeting limited resources to areas of high priority is essential. Effective targeting includes elements of all "3 Ps" – place, practices, and people. Place-based targeting should use the best available science and mapping coupled with local knowledge. There should also be a focus on key demographics (small dairy, Plain Sect, part-time farmers, equine, and vegetables) and key practices (no till, cover crops, forest riparian buffers, and manure management.)
- 3. Integrate Soil Health, Manure Management, and Riparian Ecosystem Stewardship into Water Quality Strategies.** The health of the land and water is critical to meeting both farm production and conservation needs. Approaches based on performance through land and water stewardship should be emphasized over practice based approaches. Soil health, management of manure as a resource, and stewardship of riparian ecosystems need to be priority messages. Clean and abundant water starts with soil health and function. Plans required by law must be meaningful management tools that are simple to develop and follow. Programs for forest riparian buffers must be highly incentivized, streamlined and flexible.
- 4. Support Community Based Approaches.** Local and regional community based approaches work; most if not all PA success stories to date are locally led. There is a critical need to foster more community based approaches that are farmer led, involving producers who are "thought leaders" in the community, and which build farmer-to-farmer support networks.

5. **Recognize and Support a Three Pronged Approach.** A three pronged approach is needed to accelerate adoption of conservation practices within the agricultural community: education and outreach; technical assistance; and enforcement. All three are important and complimentary, and the approach will work best if clear roles are defined and maintained, based on respective expertise and existing relationships. Challenges in meeting technical assistance demands must be overcome. Opportunities to enhance conservation training and build it into educational curriculum should be pursued. Support exists for selective, meaningful enforcement that targets bad actors with threats real and carried through.
6. **Revisit and Retool Conservation Incentive Programs.** Several existing programs work well and should continue to serve as the core of conservation incentive programs. A willingness exists however to revisit existing programs—such as forest buffer programs—to improve delivery, and explore innovative new incentive structures. Support exists to develop more strategic policies to offer—and withhold—incentives to influence action by non-compliers.
7. **Collaboratively Seek New Funding Opportunities.** While being more strategic in spending existing resources is critical, existing funding is insufficient. New funding opportunities were identified and must be sought. There was strong support for the formation of a diverse and inclusive coalition to develop and campaign for a collaborative new water quality funding strategy.

The Penn State Agriculture and Environment Center has agreed to take the lead to in advancing conference ideas into action. Next steps include:

- **Reconvene conference planning committee** to develop an interim action plan for quickly moving forward recommendations identified at the conference, and decide upon a framework to continue to successfully advance the ideas of conference participants. Recommendations identified include: debrief key agencies; develop model scenario runs; advance compliance standard for Clean and Green, plan stormwater, multisector conferences, develop conservation program clearinghouse, identify key research needs, develop soil health and buffer strategies, and reach out to other stakeholders. The framework will likely include the development of work groups to advance identified actions and initiatives.
- **Develop draft conference report** for review by planning committee and conference attendees. The report will be ready for review by conference attendees by early May.
- **Reconvene conference attendees** in early June to discuss the report, solicit feedback, and develop action plans for priority action items.
- **Debrief key agencies and stakeholders.** Beginning immediately, the AEC will debrief key agencies and stakeholders, working collaboratively to advance identified initiatives, strategies and short term actions. Conference attendees are encouraged to share this conference summary with colleagues within their organizations and other interested partners.

Background

On March 1-3, 2016, the College of Agricultural Sciences together with other partners hosted the *Pennsylvania in the Balance Conference* in Hershey, PA. This conference provided a collaborative forum where motivated leaders in agriculture and the environment identified new, innovative solutions that can help ensure vibrant, productive agriculture while meeting water quality goals for the Commonwealth's rivers and streams and the Chesapeake Bay.

Almost 120 diverse stakeholders attended, including farmers, agricultural industry representatives, scientists, federal and state agencies, researchers and Extension personnel, agricultural and environmental attorneys, nonprofit conservation organizations, conservation districts, planners, and agricultural consultants.

The conference framework allowed for initial plenaries on day one, where experts shared relevant background information and scientific studies related to Pennsylvania and the Chesapeake Bay. A producer panel representing a wide diversity of Pennsylvania agriculture shared their perspectives to begin the second day. Over days two and three, attendees participated in facilitated small group work sessions on key topics, including targeting resources, technical assistance, innovations in incentives, compliance, and new funding strategies. Each small group represented a cross section of the stakeholders involved in these issues. The format allowed leaders from diverse perspectives to work together to identify barriers, opportunities and solutions, ask and answer hard questions, facilitate productive dialogue, build trust, and identify pathways forward to implement actionable outcomes.

At the end of three days, clear themes emerged which, if seized upon, can form the basis of a new consensus based, collaboratively focused strategy to ensure profitable and productive agriculture while achieving water quality goals. **This strategy embraces agriculture and its ingrained *culture of stewardship*, and looks for leadership from agriculture to *be the solution* to clean water.**

A set of initial recommendations and action items were identified at the close of the conference, which will be advanced collectively under the leadership of the Penn State Agriculture and Environment Center. This collective effort has the potential to complement and enhance the Commonwealth's recently announced new strategy for Chesapeake Bay restoration. The conference created a renewed energy among participants and a commitment to take collective action moving forward to resolve this complex and challenging problem.

Themes

After synthesizing the over 100 pages of notes from the conference, the following themes were identified:

1. Embrace a Culture of Stewardship

Agriculture has high standards for conservation, with roots in a multigenerational culture of stewardship. Farmers are ready to lead, and be the solution for clean water.

Farmers take very seriously land and water stewardship and practice it every day on their farms. This culture of stewardship is prevalent in the agricultural community, and should be embraced. Farmers are leaders in land and water stewardship within their communities. Those practicing good stewardship do not condone poor managers who are causing water quality problems. Programs to recognize and reward farmers meeting high conservation standards (e.g., certification programs, signage, ag certainty) have strong appeal in the agricultural community and may help raise the conservation bar.

2. Employ Effective Targeting

Targeting limited resources to areas of high priority is essential. Effective targeting includes elements of all “3 Ps” – place, practices, and people.

Targeting is essential to strategic use of limited resources and achieving maximum water quality benefit for resources spent. Effective targeting should involve not only geography but all “3 Ps” – place, practices and people. Place-based targeting should use the best available science and mapping to identify priority watersheds (e.g., NRCS prioritization using SPARROW model), and further, localized refinement using science and mapping coupled with local knowledge (CCDs, NRCS, Extension, farmers). There should be a focus on key demographics within the agricultural community (small dairy, Plain Sect, part-time famers, equine, and vegetables). Key practices should be prioritized (no till, cover crops, forest riparian buffers, and manure management.)

3. Integrate Soil Health, Manure Management, and Riparian Ecosystem Stewardship into Water Quality Strategies

The health of the land and water is critical to meeting both farm production and conservation needs. Soil health, management of manure as a resource, and stewardship of riparian ecosystems need to be priority messages that are infused into the Commonwealth’s water quality restoration strategies.

Approaches based on performance through land and water stewardship should be emphasized over practice based approaches. We are blessed with water in Pennsylvania. Clean and abundant water starts with soil health and function. Supporting soils as living organisms and best management practices for water infiltration and purification is crucial to meeting both agricultural production and water quality goals. Managing manure not as a waste product but as a resource to support crop production and soil health is also a critical message for farmers. Plans required by law must be meaningful management tools that are simple to develop and follow, to ensure they are actually implemented and actively used

to guide farm management. While forest riparian buffers are a tougher sell with producers, they remain a highly valued, priority practice. Programs for forest riparian buffers must be highly incentivized, streamlined and flexible. The importance of farmers in practicing riparian ecosystem stewardship and providing multiple, ecosystem service benefits for the farm, the community and society should be emphasized.

4. Support Community Based Approaches

Local and regional community based approaches work. There is a critical need to foster more community based approaches that are farmer led.

Most if not all success stories to date in Pennsylvania involve locally led, community based approaches to water quality improvement. Resources must be made available to achieve success; not only to provide technical assistance and implement practices, but enhance capacity by building and sustaining local leadership and watershed based community engagement and partnerships. These approaches must be organic and customized to the specific region, community and local leadership structure and dynamics. Regional coalition approaches should be fostered, where multiple partners share expertise, leverage funding, and improve efficiencies to achieve greater conservation outcomes. Particularly important are farmer led initiatives which involve producers who are “thought leaders” in the community, and which build farmer-to-farmer networks, such as the successful PA No Till Alliance. These strategies work and are highly embraced by the agricultural community. Farmer led efforts ensure the trust which is necessary to reach other farmers, and can cost effectively provide education, moral suasion and technical assistance to other farmers.

5. Recognize and Support a Three Pronged Approach to Accelerate Conservation

A three pronged approach is needed to accelerate adoption of conservation practices within the agricultural community: education and outreach; technical assistance; and enforcement.

All three of these prongs are important and complimentary, and the approach will work best if clear roles are defined and maintained, based on respective expertise and existing relationships. Challenges in meeting technical assistance demands must be overcome. Consideration should be given to developing and deploying conservation “tiger teams” in locations of priority need. While highly trained technicians (i.e., “land doctors”) are often needed to work with producers and identify and design solutions to complex resource concerns, farmer “self-help” tools can be useful for simpler technical assistance needs. Opportunities to enhance, improve or streamline conservation training should be pursued, so long as the high degree of professionalism and rigor in the current NRCS/CCD/Extension training partnership is maintained. Conservation training opportunities should also be built into youth education and college curriculums. Support across stakeholders exists for selective, meaningful enforcement. An effective, strategic enforcement strategy should target bad actors for enforcement, with the threat of enforcement real and carried through.

6. Revisit and Retool Conservation Incentive Programs

Several existing programs work well and should continue to serve as the core of conservation incentive programs. A willingness exists however to revisit existing programs to improve delivery, and explore innovative new incentive structures.

With respect to existing programs, the need to develop a more streamlined, flexible riparian buffer program and fix existing technical assistance delivery challenges was identified. Support exists to develop more strategic policies to offer—and withhold—incentives to influence action by non-compliers. Improvements to existing programs were discussed (e.g., property tax credits for REAP, baseline conservation plan requirements for Clean and Green). New incentive programs should also be considered and developed (e.g., consumer based incentives for “PA premium” products, debt forgiveness, reverse auctions, and public/private partnerships for legacy sediment remediation and stormwater management). Finally, development of a web based clearinghouse for incentive program information should be considered.

7. Collaboratively Seek New Funding Opportunities

While being more strategic in spending existing resources is critical, existing funding is insufficient to achieve our water quality goals. New funding opportunities must be sought. A unified, collaboratively developed funding strategy offers the best chance for success.

Opportunities for new funding sources were identified and included water use fees, foundations, traditional public fundraising campaigns, MS4s, corporations and industry. There was strong support for the formation of a diverse and inclusive coalition to develop and campaign for a collaborative new water quality funding strategy. This strategy should include innovative ways for spending money more effectively, for example, the development and funding of regional coalitions in priority areas which are locally led and demonstrate flexibility and efficiency in spending dollars to achieve successful conservation outcomes.

Recommendations

During the final session of the conference attendees discussed recommendations for moving forward, identifying short and long term action items, additional stakeholders to approach, and organizational frameworks for advancing conference outcomes. The following summarizes these recommendations.

- **Short term action items**

- Disseminate conference information (website, etc.)
- Debrief key agencies and organizations (DEP, DCNR, EPA, Chesapeake Bay Program partners, Ag Workgroup, other Bay states, PA legislature, CCDs)
- Work with EPA to develop scenario runs to help define and refine approaches
- Advance compliance standard concepts for Clean and Green (HB 1447)
- Plan and hold a similar conference on stormwater, followed by a multi-sector conference
- Develop conservation incentives program clearinghouse
- Hold forum to identify key research needs

- **Long term action items**

- Develop comprehensive and strategic communications and marketing plan
- Build upon existing efforts (NRCS, No Till Alliance, Extension, PASA) to develop comprehensive soil health strategy
- Through DCNR Forest Buffer Advisory Committee, develop comprehensive forest buffer strategy
- Develop support for research needed to advance agriculture and water quality strategies (to establish new management and practice standards, and to explore difficult questions, such as regional nutrient imbalances, environmental tradeoffs associated with practices)
- Develop new funding strategy coalition and campaign

- **Additional stakeholders**

- PA Farmland Preservation Association
- Banking community
- PA Geospatial Coordinating Board
- Marketing/communication professionals
- Local government (many farmers are elected local officials)
- Other ag sectors (equine industry, Plain Sect, part time farmers)

- **Proposed organizational frameworks for advancing conference outcomes**

- AEC will take the lead in advancing conference ideas in to action (first steps include conference summary reports, recommended debriefings)
- Conference Planning Committee could serve as core coalition (begin with committee debrief)
- Work groups should be formed to advance individual action items (these may include funding, education, mapping/technology, marketing/communication, etc.)
- Develop one page action plans for short term action items

Next Steps

The Penn State Agriculture and Environment Center agreed to take the lead in advancing conference ideas into action, working collaboratively with all to seize upon the momentum, energy and good will developed at *Pennsylvania in the Balance*. Based on the input and recommendations shared, next steps include:

- 1. Reconvene conference planning committee to develop interim action plan and framework for continued success**

The conference planning committee will be reconvened in the next few weeks to debrief on conference outcomes, develop an interim action plan for quickly moving forward key opportunities identified at the conference, and decide upon a framework to continue to successfully advance the ideas of conference participants.

- 2. Develop draft report**

Information from the conference will be further synthesized and analyzed and a draft conference report will be developed by the AEC. The report will be shared with the planning committee in early April for review and comment, with a revised draft finished by the end of April.

- 3. Reconvene conference attendees to share report and solicit feedback**

The draft report will be shared with conference attendees in May for review and comment. Conference attendees will be reconvened in early June to discuss the report, solicit feedback, and develop action plans for priority action items.

- 4. In the interim, work proactively with key agencies and stakeholders to communicate conference outcomes and advance identified initiatives, strategies and short term actions**

Beginning immediately, the AEC will share this summary and communicate conference outcomes to key agencies and stakeholders, including DEP, EPA, and Chesapeake Bay Program partners, working collaboratively to advance identified initiatives, strategies and short term actions. Conference attendees are encouraged to share this conference summary with colleagues within their organizations and other interested partners.

For more information, comments, questions or suggestions, contact Matt Royer, Director, Penn State Agriculture and Environment Center, mroyer@psu.edu, (814) 863-8756.