

Lancaster County Conservation District

“2010 Plan”

Chesapeake Bay  
Tributary Strategy

Approved by: Lancaster County Conservation District Board of Directors – Feb. 2, 2005

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Chesapeake Bay Tributary Strategy

**Introduction**

The time has come by both default and design to address the threats posed by mankind to one of our nation's treasures, the Chesapeake Bay. It could be said that we, as a society, have missed several opportunities in the last 400 years to address the impact that our developing nation has had on the Bay. This is a true statement and calls for little debate. It began when Columbus and his friends and those who came after him began to colonize the east coast of the new world, impacting the natural resources forever.

During the Dust Bowl Days of the 1930s we, as a Nation realized and admitted the need for soil conservation. We conceded that if we were to eat, then a certain amount of soil would be lost. But how much soil could we stand to loose? The "tolerable amount" of soil that would be lost to erosion while cultivating crops for food and fiber is referred to as "t". The best scientist of the twentieth century estimated maximum "t". Farmers embraced the challenge to become stewards of the Nations greatest treasure, our life giving soil. Over the past 70 years an increasing number of Lancaster County farmers have maintained and/or improved soil health by implementing farming practices that reduced soil erosion to a tolerable level. The question today is. Are we adequately reducing nutrient and sediment loss fast enough?

All who enter into this great debate of reducing nutrient and sediment loading into the Bay must first agree it is "our" problem. Nutrient and sediment deposition into the Bay is not just a problem for farmers, fisherman or landowners, but also for consumers, politicians and future generations!

This document is not intended to be a recant of history, but an effort to set forth a course of action by the Lancaster County Conservation District (LCCD or District) to reduce nutrient (nitrogen and phosphorus) and sediment loading to the Bay. The District is responding to the challenge set forth by the Chesapeake Bay Program (CBP) as administered by the Department of Environmental Protection (DEP) to format a progressive work plan to be implemented over the next five years in an effort to meet the Tributary Strategy. LCCD has convened a special committee to review the District's ability to meet the goals as established in the Tributary Strategy for Lancaster County. The results of those committee meetings, plus District Board oversight, District Bay Team meetings and DEP etc., are set forth in this proposal.

**To meet the Tributary Strategy the District will** develop a plan to meet a goal of greater than 90% compliance with environmental regulations for agricultural operations in Lancaster County.

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## **County Description**

Often described as the “Garden Spot”, Lancaster County boasts of a charming country flavor with a unique mix of the required amenities to make it one of the most sought after addresses in the northeastern United States. Lancaster County became well known following the successful New York play “Plain and Fancy”. Lancaster County became not only a destination for vacations and tourist but also a place to live, work and retire. Located in southeastern Pennsylvania, Lancaster County contains 603,800 acres of land. Two thirds or approximately 344,000 acres of Lancaster prime agricultural soils are classified as Class I and Class II soils. Approximately 396,000 acres in Lancaster County are tillable. According the American Farmland Trust Lancaster County agriculture generates \$3.2 million annually. One in five workers in Lancaster County are employed in either production agriculture or agribusiness.

Lancaster County has over 1,365 miles of streams, of which 470 miles are impaired (34%). Of the impaired stream reaches in the County over 393 miles (84%) of that impairment is due to agricultural sources such as sediment and nutrients. Add the fact that 98% of Lancaster County drains to the Chesapeake Bay and these numbers become more significant. Finally, add in that almost 5% of the total drainage area going to the Bay is in Lancaster County, and one can see that Lancaster County will play a pivotal role in cleaning up the Bay.

The county is ranked as the most productive non-irrigated county in the United States which in turn generates a huge agri-business industry that serves not only Lancaster County but, also a much larger agricultural industry within Pennsylvania. The Lancaster agri-business infra-structure serves as a base for much of the Middle-Atlantic area beyond the boundaries of both the county and the state. Lancaster is home to more than 5,000 farmers and supporting agri-businesses in addition to a solid non-agricultural industry. The strong goods and services industry provides many jobs at entry level as well as middle and upper level management. A new occurrence has also impacted the county as pressures mount from Baltimore, Philadelphia and Washington DC areas commuters seeking housing in the Lancaster County. Land available for building is becoming increasingly unaffordable. In the past few years Lancaster County has had a net increase of 4,500 people per year. The challenge of interfacing agriculture with a growing population of nearly a half million people (450,000 as per the 2000 census) is a daunting task. To preserve, yet to grow, is a difficult balancing act for the Lancaster County Planning Commission and each local municipality. The District continues to be influential in this dilemma by providing representation for agriculture and agri-business by continued involvement in such efforts as: Smart Growth Initiatives, Growth Management Taskforce, Building for the Bay, plus many others.

Reviewing the data included in the 1983 Chesapeake Bay Program (CBP) report against today’s data indicates that the same trends in production agriculture are continuing twenty years later. Noted within the 1983 document is the increasing scale of production agriculture. The “English” farmers have increased both acreage and livestock numbers at a higher rate than their “Plain Sect” counterparts, yet both have increased agriculture production significantly based on percentages. Just as twenty years ago when the CBP noted a lack of farm conservation plans as the critical element in developing a plan to address environmental issues on Lancaster County farms, the need exists, yet today.

Currently, a single District staff member has been committed to an annual goal of 2,500 acres of farm conservation planning per year. Beginning with 2005 the baseline goal of 5,000 acres of farm conservation planning will be the goal for 10 staff members. This goal will be increased by 25% each year thereafter until a minimum of greater than 12,000 acres will be planned annually by District staff. Even with this fivefold increase in farm conservation planning, a large gap remains. It is estimated that 3,000 of the County's 5,000 farmers need a new or revised farm conservation plan. In combining the efforts of both LCCD and NRCS, the Districts' most optimistic outlook is 22,000 acres of farm conservation planning per year. Given an average farm size of 75 acres the number of years needed to complete this mission is 12 years.

**To meet the Tributary Strategy the District will** develop targeted job performance that can positively impact the Tributary Strategy by focusing a greater portion of the technician's time on farm conservation plan development and implementation. The District will increase the current capacity to write farm conservation plans by twofold beginning in 2005 and increasing fourfold by 2008.

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### **LCCD Organizational Structure**

The District has altered the existing organizational structure. The result of the reorganization is a more direct supervisory linkage. Previously, several staff members did not report to a program manager for day to day oversight, but rather reported to the District Manager. The District Manager responsibilities for District operation makes him inaccessible for days at a time. With the new structure all employees will have an immediate supervisor (middle management).

(See the following page for the revised District organization structure.)

**To meet the Tributary Strategy the District will** hold accountable the Program Managers to review an individual employee's monthly, quarterly and annual performance goals.

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Revised Organization Structure insert

## **Revised Job Descriptions/Teams/Training**

The District has been operating with eight staff members filling three separate job descriptions. They are:

Agricultural Conservation Technician (1) – develops Farm Conservation Plans

Nutrient Management Technician (3) – reviews Nutrient Management Plans (NMP) and conducts status reviews as per ACT 6

Chesapeake Bay Technician (4) – development and implementation of ag BMPs

Although the current structure provides the best opportunity for individual technicians to hone their skills in a single discipline, it also has been blamed for high employee turn-over. The turn-over rate within the NMP appears to be a result of the limited variety within the current job description.

Additional confusion on the client's part is also generated by the number of different District employees who may work with each farmer. For example, a farmer may deal with one technician for their NMP, another for the Conservation Plan, and yet another one or two for the development and installation of ag BMPs.

The concept of a technician who can provide technical expertise in all three areas has been under consideration by the District for several years. The idea of a "Super-Tech" is not a new concept as many conservation districts have been required to split positions due to smaller work loads and fewer staff employees. LCCD has had the luxury to have specialized technicians due to the large agricultural base. As mentioned previously this may have led to a high employee turnover. The challenge before the District at this point in time is to utilize the size and scope of the agriculture industry in Lancaster County to generate success for each technician.

The County will be divided into four geographic regions with one team of 2-3 District employees plus one NRCS employee serving each region. The designated municipalities for each technician have been identified on the following page.

Currently each technician in the various programs (NMP, Bay Tech and Conservation Planning) work independently of each other. Hence, different technicians visit the farm, offering different expertise. Collaborative effort as a joint venture has only occurred for the purposes of helping with surveying and program eligibility. In order to foster an atmosphere of teamwork for the purpose of propelling the conservation agenda, the District proposes to develop a team concept for the ten technicians.

Each technician will be a member of a team. Two or three District employees plus one NRCS staff member will constitute a team. Just as the technician will have goals and benchmarks so will the team. Team members can assist each other in completing task and working collaboratively. The County will have four distinct geographic areas based on municipal boundaries. This scenario of combining the existing 8 positions with 2 additional positions will allow each technician to be primarily responsible for 4-6 municipalities (currently each technician covers 10-15).

The District will develop an employee training program to assist both currently employed personnel as well as new employees. The District has requested \$17,500 in “Special Project” funding to support the training of the staff. The training program for all District employees will contain topics such as, but not limited to the following:

- Developing people skills (understanding personality types, salesmanship, conflict resolution)
- Understanding the plain sect
- Farmstead site assessment
- How to handle complaints/violations
- Promoting Conservation
- Economics and profitability of Lancaster agriculture
- Inter-relationship between production agriculture and agri-business
- Developing Farm Conservation Plans
- Ag BMP design and implementation
- Follow-up on structural and cultural practices

For new employees hired as Agriculture Conservation Technicians the basic track for professional development will begin with the Nutrient Management Program. The training program, examination, and certification will consume approximately the first 6 months of employment. After completion of the NMP training, the technician will be exposed to both ag BMPs as well as the basics of developing a conservation plan. The District will expect all new technicians to reach a minimal level of competence in all three areas (NMP, ag BMPs, farm conservation plan development) in 1.5 – 2.5 years.

The work of the technicians will continue to be critiqued by either the Assistant District Engineer and/or the District Engineer. The goals of the Bay Tributary Strategy will be served by the District’s ability to retain and adequately fund the positions of Assistant District Engineer and District Engineer. Farmers in Lancaster County have benefited in the past from the District’s ability to provide the best technical and engineering support. In the future less structural practices will be emphasized by the CBP however, some design work will always be needed. The Assistant District Engineer and the District Engineer will provide the leadership and training for technicians in the area of cultural field practices.

**To meet the Tributary Strategy the District will** combine three separate job descriptions into one job description: develop targeted job performance for individual technicians, create four teams county-wide and design a training program for current and new employees.

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**Job Performance Goals**

Both experienced and newer technicians will be encouraged through the use of individual annual goals and annual team goals to work in a fashion consistent with prioritization of ag BMPs as noted previously. The baseline goal for each technician will be determined by level of experience and geographic and demographic factors. A technician cannot be held more accountable for ag BMPs that may be more “English” specific and less “Plain Sect” applicable and visa versa. All technicians will be expected to develop conservation plans, review nutrient management plans and assist farmers in developing and implementing ag BMP’s. The Program Manager will review monthly and quarterly reports, providing oversight, encouragement and guidance to assist the technicians in meeting and/or exceeding their annual goals.

Each technician will have job performance goals and will be responsible to develop and implement ag BMPs plus review, approve and perform status reviews of nutrient management plans. During the first year with a very inexperienced staff great care will be taken by the Program Managers and Administration to assist each technician in achieving his/her goals. In some cases, job performance goals may need to have a mid-year correction. Team members will be able to assist each other in meeting and/or exceeding individual and/or team goals.

**To meet the Tributary Strategy the District will** develop job performance goals, and based objectives to both guide and evaluate each technician’s effectiveness in meeting targeted goals. Baseline goals or benchmarks will be developed for each technician specific to their geographic/demographic area.

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## **Ag Best Management Practices (BMP) Prioritization**

The District's annual planning meeting was held on November 5, 2004. The goal of the annual planning meeting was to review the work of the District with partnering agencies (Farm Service Agency, NRCS, Penn State Cooperative Extension, Agric-businesses etc.). Broken into groups of 6 – 8 people, the 60 people in attendance ranked a list of ag BMPs on both an efficiency basis and a real world (Lancaster County) implementation rate. Although far from a scientific analysis the results parallel other studies conducted by the Chesapeake Bay Foundation plus the professional opinion of many soil scientists, engineers and technicians. The top ten BMP's as prioritized at the annual meeting are as follows:

### Score Agriculture BMPs

93	Nutrient management plan (development & implementation)
85	Cover crops
68	Management advice (follow-up for structural and cultural practices)
65	Structural field practices (grass waterways, terraces etc.)
60	Conservation tillage
60	Implemented farm conservation plan
55	Cultural field practices (crop rotation, residue man., delete end rows, etc.)
54	Developing a farm conservation plan
50	Grass buffers 15'
40	Animal waste system (4-6 month storage)

Upon review of this ranking, one could make a case that if the two ag BMPs of Implemented farm conservation plan and Developing a farm conservation plan had been combined as one category, it would have been the highest ranking single ag BMP. Given this understanding of importance a primary focal point for technicians will be the development of Farm Conservation Plans. An article in the BAY JOURNAL, Dec. 2004 issue, the six most cost effective ways to reduce nutrients introduction into the Bay are: Wastewater Treatment Plant Upgrades, Diet and Nutritional Adjustments, Traditional Nutrient Management, Enhanced Nutrient Management, Cover Crops, Conservation Tillage. Interesting is the close match of prioritization by the District by a different yet similar organization. Although the wastewater treatment plant upgrades are out of the District's area of responsibility, the remaining five practices are identified as agricultural BMPs.

The staff will be encouraged to work with farmers promoting sound conservation practices and supplying follow-up management advice on previously installed ag BMPs. The ultimate goal of both pre and post conservation management advice is the reduction of sediment and nutrient loading to the Bay. The District staff will work with farmers to assist them in identifying not only a maximum economic yield but to reach even further. Farmers will be challenged to consider a maximum environmental yield.

As noted in the prioritization process, the implemented farm conservation plan will require the installation of approved ag BMPs. To honor previous commitments by the District to landowners and to fully implement farm conservation plans the District has requested "Special Project" funding \$107,907 to complete existing CBP agreements.

The 33 outstanding agreements are proposed to be completed by June 30, 2007. The over-commitment by the District resulted from the abrupt decreased in cost-share dollars beginning in 2004. Future ag BMP implementation will seek other avenues of funding while technicians encourage farmers to consider reducing nutrient loading to the Bay by changing cultural practices.

The following scenario would be an example of how District staff may influence a farmers' thinking on cultural practices in regard to starter fertilizers thus, reducing nutrient loading in to the Bay.

The potential for significant nutrient reduction to the Bay exists through the reduction of manure and fertilizer applications below levels called for by nutrient management plans and those recommended by soil test labs, Penn State Cooperative Extension, and local fertilizer dealers. Because of nitrogen (N) and phosphorus (P) buildups in soils that were over fertilized by manure and/or commercial fertilizers for decades, large reservoirs of N and P exist in many Lancaster soils. New applications of manure and/or commercial fertilizers may be inappropriate for these fields and result in leaching and runoff to streams and groundwater. Eliminating the use of starter fertilizer alone that gives no yield increase on fields with a long history of manure applications could save an average of 10 lbs. of N and 20 lbs. of P per acre. Given the average Lancaster County farm of 85 acres grows about 35 -40 acres of corn and 3500 of the 5000 farms fall into this category, the magnitude of this potential reduction looks like 700 less tons of N and 1400 less tons of P would be applied per year in Lancaster County. This is a form of precision agriculture that will have a direct positive effect on the amount of N and P delivered into the Bay annually.

**To meet the Tributary Strategy the District will** encourage, direct, instruct and review all work accomplished by District employees to be prioritized in concert with the outcome from the annual planning meeting, plus input from soil scientists and other agencies interested in conservation and clean-up efforts for the Bay. The District will encourage technicians to focus their energies in the most cost effective and practical manner possible.

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**Manure Management**

The District will continue to follow up on complaints generated from the storage, handling and land application of both Bio-Solids and livestock manure. Through voluntary compliance and management advice the District has minimized pollution events to the Waters of the Commonwealth from livestock operations.

The District has provided technical assistance for farmers seeking on a voluntary basis, and not a complaint to minimize potential pollution events generating from uncontrolled barnyards, feedlots, and exercise areas. Additionally, farmers have requested technical assistance for the design and installation of ag waste storage in conjunction with controlling manure laden run-off. Nutrient management plans have been developed for farms requesting assistance for many types of ag BMPs.

The District will seek alternative uses for the manure, such as but not limited to, the following: (1) incineration for energy production, (2) translocation to areas of nutrient deficiency, (3) reconfiguration/composting of the waste product into a more stable fertilizer, (4) additional use in the mulch industry to create a “value-added” product, (5) pelletizing of poultry manure to facilitate stability, transport and applications, (6) injection on agricultural fields, (7) working with the Cooperative Extension Service and NRCS to educate, design and implement emissions and odor control, (8) other emerging technologies such as but not limited to methane digesters, co-generation of coal and poultry litter, etc. .

**To meet the Tributary Strategy the District will** sponsor a forum to debate, discuss and develop a suitable plan for the reduction of negative impact caused by the miss-application of livestock manure and Bio-solids, and will provide on-farm education and recommendations to encourage and guide farmer decisions. The District will also provide record keeping assistance to farmers who seek to develop a nutrient balance plan as per Chapter 91 referencing the Penn State Manure Manual.

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**Odor Management**

Related to manure issues, are odor issues and odor complaints. LCCD employs an Agricultural Ombudsman to handle these issues in a proactive way. The Ombudsman Program deals with public relations, education and conflict management related to agriculture in general, but the specific issues often are related to manure and odors. The efforts of the Ombudsman are focused on working proactively with farmers, municipalities, concerned citizens groups and Districts to minimize or eliminate controversial situations or contentious situations.

**To meet the Tributary Strategy the District will** sponsor a forum to debate, discuss and develop a suitable plan for the reduction of negative impact caused by the miss-application of livestock manure. The District will also continue in a proactive way through education to work to prevent agricultural conflict.

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**Urban Component**

The District continues to be involved in multiple out-reach efforts and opportunities within the commercial and residential development activities. The District's level III delegation with DEP enables review, inspection and enforcement of regulated earth moving activities in Lancaster County. The review process as well as workshops and round-table meeting sponsored by the District encourages new and emerging technologies for storm water management (SWM), erosion and sediment control and assistance with process and permitting requirements. Filtration has been on the forefront in the review process of erosion and sediment (E&S) control plans for several decades. Infiltration has been required with the advent of Phase II for the National Pollutant, Discharge and Elimination System (NPDES) permit requires established on December 8, 2002.

The District's Strategic Plan that was developed in 2003 identified the potential to hire a professional engineer. As the role of the District broadens to include the review of proposed storm water management plans for local municipalities the Board of Directors must grapple with the question of increasing staff by hiring a professional engineer.

Urban nutrient reduction will become a focus point for the District in 2005. The District will partner with other educational and commercial agencies to explore ways of reducing nutrient loading from Lancaster County into the Bay. One such reduction effort may be the use of a corn by-product as anti-skid material in lieu of salt and/or nitrogen based road anti-skid and de-icing products. Additionally, a greater effort will be focused on the education of the public who opt for high levels of fertility on lawn and garden areas within Lancaster County. Golf courses superintendents and public parks and recreation directors and managers will be encouraged to develop a plan to reduce and/or remove nitrogen and phosphorus fertilizers.

**To meet the Tributary Strategy the District will** coordinate with the Penn State Cooperative Extension Service, agribusinesses, Lancaster Chamber and other educational opportunities to sponsor, facilitate and coordinate meetings for homeowners, lawn care services and lawn and garden retail outlets. Additionally, the District will continue to update the website with information on nutrient reduction for homeowners, municipalities and professional lawn care businesses.

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**The Role of Enforcement**

The District has maintained a level III delegation agreement with DEP for the Chapter 102 Program. The delegation agreement indicates the District will seek voluntary compliance for violations with earth moving activities associated with the construction industry and with agricultural plowing and tilling. The District has been commended for its role in reducing sediment pollution to the waters of the commonwealth from the construction industry and agricultural industries. The District achieved a high level of compliance by both a proactive approach in educating owners and operators and by seeking voluntary compliance. Yet, there are times when voluntary compliance has not resulted in remedial actions nor determent of future events. Hence, the District by

delegation agreement proceeded with enforcement hearings and levied fines in accordance with prescribed protocol as set forth by DEP. The question of conducting an enforcement hearing for the family farmer has generated little enthusiasm over the years. The District has spent 50 years building a reputation of helping farmers. It has been and will continue to be the goal of the District to gain voluntary compliance without penalties whenever possible. Voluntary compliance requires additional time beyond the "normal" working day to be successful. Program guidelines, requirements and validation through compliance leaves very little time to adequately address legitimate agricultural complaints

Just as the District seeks voluntary compliance on construction sites the District will continue to seek voluntary compliance on farms. However, just as the need for fines is warranted by some contractors, some farm owners/operators may face similar self inflicted penalties as a result of their lack of due diligence to actively protect Lancaster's natural resources.

**To meet the Tributary Strategy the District will** continue to develop and maintain a tracking system to follow agricultural complaints and non-compliance with current regulations as per the District policy as identified in the policy manual as 02-2a.

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**Funding**

Given the need to validate the efficient utilization of tax dollars, LCCD will continue to maximize the established funding partnerships through delegation agreements, contracts, grants and line item budgets. LCCD will continue to utilize a fee structure where appropriate, within the confines of Chapter 102 and 105.

Currently LCCD is in dialogue with Pennsylvania Environmental Council (PEC) to develop and expand a "reverse auction" concept for ag BMPs funding. The results of this partnership may become the framework on which other private agencies assist the District with funding sources for implementation of ag BMPs funding. Another concept being developed is "nutrient trading". A pilot project on the Conestoga Watershed has been in the development stages for several years and the first trade became reality in 2004. The District will position itself to facilitate the trade via development, implementation and accreditation of the trade. Nutrient trading can be a source of funding agricultural BMPs from non-traditional sources.

The Department of Environmental Protection has identified the continuation of the CBP is paramount to addressing the Tributary Strategy. During 2004 the District experienced a significant loss in cost-share funding for farmers. Additional budgetary expenses for District engineers and assistant engineers plus the temporary freezing of vacated positions caused great concern for all who are involved with the CBP. At minimum the current staff of four technicians, one engineer and one assistant engineer must be maintained. Additional staffing may be required in the following years to address the county's needs.

The Chesapeake Bay Advisory Committee recently recognized the need for significant additional funding as recommended by a Blue Ribbon panel. The additional funding must come from new sources that are directly targeting the Bay's clean-up effort. Such

funding could come from new sources, such as but not limited to Pennsylvania Environmental Council, Lancaster Farms Project via Environmental Defense, Growing Greener Grants, Federal 319 Grants, Farm Bill, Chesapeake Bay Foundation, Conservation Fund, nutrient trading programs, reverse auctions, direct taxation, certification and licenses permits and fees, plus penalties levied for pollution events.

**To meet the Tributary Strategy the District will** become an active player in both nutrient trading program as developed by DEP and “reverse auctions” nutrient trading via Pennsylvania Environmental Council (PEC). The trading programs will provide financial incentives for farmers seeking to meet minimum implementation requirements as per their Farm Conservation Plan. Additionally, LCCD will seek additional non-traditional avenues of funding through both private and public sources.

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**Tributary Numbers for Lancaster County**

The following numbers represent the complete list of all potential areas of reduction sought by the Chesapeake Bay Tributary Strategy. These numbers were distributed to the District on October 19, 2004 and differ from the Tributary numbers supplied in January 2005 and noted on page #18. It is the intent of the District to address as many of the Tributary numbers as possible from either the October list or the January list. The prioritization as determined by the District’s Board of Directors and our partnering agencies at the annual planning meeting plus collaborating data from various scientific sources. The District will adjust and correct the direction of the technicians on a monthly, quarterly and annual basis.

Abandon Mine Reclamation	9	Acres
Animal Waste Systems	186,981	AEUs
Carbon Sequestration	35,521	Acres
Farm Conservation Plans	264,085	Acres
Conservation Tillage	147,951	Acres
Cover Crops (Early)	138,092	Acres
Dirt and Gravel Road	120,353	Feet
Erosion and Sedimentation Controls	2,316	Acres
Forest Buffers	5,354	Acres
Forest Harvest Practices	0	Acres
Grass Buffers	9,921	Acres
Horse Pasture Management	23,185	Acres
Land Retirement	36,521	Acres
Managed Precision Agriculture	127,146	Acres
Mortality Composters	5	Units
Non-Urban Stream Restoration	24,027	Feet
No-Till	62,262	Acres
Nutrient Management	43,781	Acres
Off-Stream Watering w/fencing	24,688	Acres
Off-Stream Watering w/o fencing	14,813	Acres
Precision Rotational Grazing	5,925	Acres
Rotational Grazing	3,950	Acres

Septic Denitrification (family units)	21,836	Units
Street Sweeping	3,269	Acres
SWM – Filtration	24,502	Acres
SWM – Infiltration Practices	24,502	Acres
SWM – Wet ponds and wetlands	24,502	Acres
Tree Planting	670	Acres
Urban Growth Reduction	1,718	Acres
Urban Nutrient Management	44,804	Acres
Urban Stream Restoration	0	Acres
Wetland Restoration and/or Creation	387	Acres
Yield Reserve	43,781	Acres
Dairy – Precision Feeding	121,603	AEUs
Dairy – Emissions Controls	40,564	AEUs
Swine- Phytase Additive	56,420	AEUs
Swine- Emissions Controls	28,276	AEUs
Poultry- Phytase Additive	68,513	AEUs
Poultry- Emissions Controls	58,236	AEUs

**To meet the Tributary Strategy the District will** develop a tracking system for all previously installed and future ag and non-ag BMPs. The development of the Tracking system will be developed in partnership with NRCS and DEP.

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**Job Performance Goals**

To hold accountable the day-to-day activities of each technician plus provide positive feed-back of a job well done the following targeted job performance objectives will be developed for each technician. Each technician’s goals will be different due to level of experience, geographic area and critical issues in their area.

**To meet the Tributary Strategy the District will** complete the following for each technician on a monthly, quarterly and annual basis.

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**Agriculture Conservation Technician  
Job Performance Goals**

(Name) \_\_\_\_\_ (Date) \_\_\_\_\_ to (Date) \_\_\_\_\_

- \_\_\_\_\_ Number of Nutrient Management Plan Reviews
- \_\_\_\_\_ Number of Nutrient Balance Plans
- \_\_\_\_\_ Number of Act 6 Status Reviews
- \_\_\_\_\_ Nutrient Management Certification (Public)
- \_\_\_\_\_ Acres of Conservation Planning (new)
- \_\_\_\_\_ Acres of Conservation Planning (revised)
- \_\_\_\_\_ Ag BMPs Promotion (minimum hours)
- \_\_\_\_\_ Ag BMPs Designed (minimum hours)
- \_\_\_\_\_ Ag BMPs Implemented (minimum hours)
- \_\_\_\_\_ Ag BMPs Follow-up (minimum hours)
- \_\_\_\_\_ Admin./Ref/Conf/Workshops (maximum hours)
- \_\_\_\_\_ Special Projects and Grant Applications
- \_\_\_\_\_ Conservation Planning Certification
- \_\_\_\_\_ NRCS Job Approval Authority
- \_\_\_\_\_ Other

\_\_\_\_\_  
Technician Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Team Leader Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Program Manager Signature

\_\_\_\_\_  
Date

1 **Professional Development (revised/expanded)**

2 5/24/05

3  
4 The proposed professional development training program will assist both currently employed  
5 personnel as well as providing a base format to train new employees hired after 7/1/05. The  
6 District has been awarded \$5,000.00 in Special Project Funding in Round # 1 through the CBP.  
7 This Special Project funding will be used to support the training of all District staff. The training  
8 program will contain topics such as, but not limited to the following:

9  
10 Developing people skills:

11 Understanding personality types

12 Basic salesmanship

13 Conflict resolution

14  
15 Professional Presentation

16 Attire

17 Language

18  
19 Understanding the plain sect

20 Amish

21 Mennonite

22  
23 Farmstead site assessment

24 PEACE & OFAR Programs

25 Chapter 102/105

26  
27 How to handle complaints/violations

28 First Impression

29 Follow-up

30  
31 Promoting Conservation

32 Ag BMP's

33 No-till

34  
35 Economics and profitability of Lancaster agriculture

36 Current Trends

37 Sows/Plows and Cows

38  
39 Inter-relationship between production agriculture and agri-business

40  
41 Ag BMP design and implementation

42  
43 Follow-up on structural and cultural practices

44  
45 For new employees hired as Agriculture Conservation Technicians the basic track for  
46 professional development will begin with the Nutrient Management Program. The training  
47 program, examination, and certification will consume approximately the first 6 months of  
48 employment. After completion of the NMP training, the technician will be exposed to both ag  
49 BMPs as well as the basics of developing a conservation plan. The District will expect all new  
50 technicians to reach a minimal level of competence in all three areas (NMP, ag BMPs, farm  
51 conservation plan development) in 1.5 – 2.5 years.

