

**Testimony of Marel Raub, Pennsylvania Director, Chesapeake Bay Commission
before the
Pennsylvania Senate Agriculture and Rural Affairs Committee
Lebanon, PA
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Good morning. My name is Marel Raub and I am the Pennsylvania Director for the Chesapeake Bay Commission, a tri-state legislative commission that advises the General Assemblies of Pennsylvania, Maryland, and Virginia on matters of bay-wide concern. In Pennsylvania, the Commission members include Sen. Mike Brubaker and Sen. Mike Waugh, and Rep. Fairchild, Rep. Hershey, and Rep. Staback in the House. The public member is Mr. George Wolff, and the Governor's representative is Secretary Kathleen McGinty of the Department of Environmental Protection.

Thank you for the opportunity to speak before you today. The subject of my remarks is the implementation of the Chesapeake Tributary Strategy here in Pennsylvania, and specifically the Strategy as it relates to agriculture.

The Strategy is the latest and most comprehensive effort in a 25-year partnership to restore the Chesapeake Bay, the nation's largest and most productive estuary, that is currently on the EPA "impaired" waters list, meaning that its water quality will not sustain its designated uses for fisheries and fish habitat. The main sources of impairment are excess nitrogen, phosphorus, and sediment. The resolution of citizen suits during the late 1990s has left the states in the watershed with a deadline of 2010 to improve water quality sufficient to remove the Bay from the impaired waters list or be subject to the imposition by U.S. EPA of a Total Maximum Daily Load (TMDL). In 2000, all six states in the watershed -- Pennsylvania, Maryland, Virginia, New York, West Virginia, and Delaware, along with The District of Columbia and the Chesapeake Bay Commission agreed to take action at the state level to remove the Bay from the impaired waters list and avoid action at the federal level by EPA. To that end, each state has developed a state-specific "Tributary Strategy" that addresses the nutrient and sediment loads from each subwatershed and outlines a plan to reduce those loads to targeted levels. The plans are tributary specific, because we now have an understanding of how nutrients and sediment flow through the watershed and how that flow impacts individual segments of the Bay. Pennsylvania includes watersheds of two main tributaries -- the Susquehanna, which provides 50% of the freshwater to the Bay, 90% of the flow to the upper Bay, and the Potomac.

The good news is that Pennsylvania is already sending cleaner water to the Chesapeake. At all monitoring stations along the Susquehanna, levels of nitrogen, phosphorus, and sediment are showing statistically significant declines, with one exception, Marietta, where nitrogen levels have been constant. Likewise, the levels of underwater grasses in the upper bay, a key indicator of water quality, have made a significant comeback, to more than 80% of the 2010 goal. Obviously, nutrient management and other conservation practices implemented by Pennsylvania farmers are making a difference,

even in the face of population growth in the same watershed. The bad news is that other indicators in the Bay show we still have a long way to go.

DEP's plan to reach our 2010 goals calls for significant implementation of several agricultural best management practices -- everything from cover crops to dairy precision feeding, all of which cost money. Assuming continuation of the historical trends where farmers pay 25% of the practice costs and the federal and state share equally in the remainder, the estimated federal and state costs are between \$85M and \$90M annually, a four-fold increase from current levels.

This is why legislation such as the Resource Enhancement and Protection Act at the state level, and the Farm Bill at the federal level, are so important. Pennsylvania, and Lebanon County in particular, has a historic opportunity to have its voices heard in Congress during the Farm Bill debate, thanks to the leadership of Congressman Holden and its chairmanship of the subcommittee responsible for conservation, credit, and energy.

Many of the reforms being advocated for at the federal level would leverage state agricultural conservation investment with federal funds, and vice versa. Pennsylvania's historic commitment to agricultural conservation already stands out, and additional funding through REAP would further provide a competitive advantage.

However, we are aware that the four-fold increase needed is not realistic in the short term. Consequently, we recognize the need for new, innovative, and cost-effective practices not currently considered in the Tributary Strategy. Many of these practices may be energy-related. Energy programs have also been a focus of our Farm Bill discussions, expanding the realm of energy feedstocks beyond even cellulose to manure, addressing a significant environmental and economic concern for farmers.

Regardless of the practices available, they have little meaning if the human capital is not available to implement them. NRCS and conservation district staff have been and will continue to be critical to successful agricultural conservation.

Additionally, the Commission recognizes that the public at large benefits from cleaner water, but connections between quality of life and the economics of program funding are not always apparent. That is why educational programs such as the Envirothon and the Chesapeake Watershed Education Program are extremely important, and help to achieve an additional Chesapeake restoration goal, which is to give every student in the watershed a "meaningful outdoor watershed experience" before they graduate from high school.

Finally, the Commission continues to look at the full range of factors affecting the Bay and its watershed, including forestry, development, and wastewater treatment. As a legislative staff person, I offer my assistance to the Committee and its members, as well as the assistance of my colleagues in Maryland and Virginia, as you address these important issues. Thank you.

**Table 3.E.
Pennsylvania Tributary Strategy Best Management Practices**

MANAGEMENT PRACTICE	UNITS	Strategy Goal	2,002 Implementation	Remaining Implementation
AGRICULTURE				
Animal Waste Management Systems	AEUs	805,330	496,915	308,415
Carbon Sequestration	Acres	288,442	T	288,442
Conservation (Farm) Plans	Acres	2,385,876	1,206,254	1,179,622
Conservation Tillage	Acres	1,052,763	607,047	445,716
Cover Crops (early)	Acres	951,577	T	951,577
Forest Buffers	Acres	106,484	4,226	102,258
Grass Buffers	Acres	35,320	471	34,849
Land Retirement	Acres	260,907	76,880	184,027
Managed Precision Agriculture	Acres	1,186,303	T	1,186,303
Mortality Composters	Systems	36	T	36
Non-Urban Stream Restoration	Feet	33,400	T	33,400
No-Till	Acres	480,592	0	480,592
Nutrient Management	Acres	403,246	1,164,192	-760,946
Off Stream Watering w/Fencing	Acres	199,755	14,101	185,654
Off Stream Watering w/o Fencing	Acres	119,853	2,130	117,723
Precision Rotational Grazing	Acres	47,197	0	47,197
Rotational grazing	Acres	32,333	11,996	20,337
Horse Pasture Management	Acres	226,128	0	226,128
Tree Planting	Acres	2,596	2,599	-3
Yield Reserve	Acres	401,966	0	401,966
Ammonia Emission Reductions - Poultry	AEUs	121,988	0	121,988
Ammonia Emission Reductions - Swine	AEUs	119,584	0	119,584
Ammonia Emission Reductions - Dairy	AEUs	162,562	0	162,562
Precision Feeding - Dairy	AEUs	487,687	0	487,687
Phytase Feed additive - Swine	AEUs	234,384	0	234,384
Phytase Feed additive - Poultry	AEUs	143,514	0	143,514
MIXED OPEN				
Abandoned Mined Land Reclamation	Acres	14,562	7,489	7,073
Dirt & Gravel Road Practices	Feet	2,857,822	0	2,857,822
Forest Buffers	Acres	10,434	46	10,388
Non-Urban Stream Restoration	Feet	367,070	0	367,070
Nutrient Management	Acres	1,248,943	0	1,248,943
Tree Planting	Acres	26,575	26,577	-2
URBAN				
Erosion & Sediment Controls	Acres	17,715	19,349	N/A
Forest Buffers	Acres	4,295	0	4,295
Grass Buffers	Acres	8,395	0	8,395
Septic Denitrification	Systems	288,513	24,937	263,576
Street Sweeping	Acres	29,957	0	29,957
Stormwater Management - Filtration	Acres	250,639	0	250,639
Stormwater Management - Infiltration Practices	Acres	250,891	0	250,891
Stormwater Management - Wet Ponds & Wetlands	Acres	250,891	0	250,891
Urban Stream Restoration	Feet	4,000	0	4,000
Urban Sprawl Reduction	Acres	7,118	0	7,118
Urban Nutrient Management	Acres	442,410	0	442,410
FOREST				
Dirt & Gravel Road Practices	Feet	2,483,036	0	2,483,036
Forest Harvesting Practices	Acres	515	0	515
Non-Urban Stream Restoration	Feet	11,780	0	11,780
MULTIPLE LAND USE				
Wetland Restoration	Acres	4,000	1,068	2,932
AEU = Animal Equivalent Unit equal to 1000 pounds of animal weight				
T = Indicates that practice is being implemented, but tracking has not been completed				

CHESAPEAKE BAY COMMISSION

WHAT THE 2007 FARM BILL SHOULD INCLUDE: *Conservation Provisions to Benefit the Chesapeake Bay*

- Double funding for the Environmental Quality Incentives Program (EQIP) and other working lands programs, and reserve a percentage of the funds for states that demonstrate a high level of performance with these programs. Remove acreage criteria from allocation formulas for financial assistance.
- Establish an EQIP-type program to support non-industrial private forest owners in their installation of BMPs and incorporate the Watershed Forestry Assistance programs established under the Healthy Forest Restoration Act of 2003 into the Forestry Title of the Farm Bill.
- Expand funding for Conservation Innovation Grants to \$100 million nationwide.
- Support the creation of a national \$200 million/year Regional Water Enhancement Program to target and leverage funding in states, including the Chesapeake Bay states, with the greatest potential for meaningful and measured water quality improvement.
- Expand CSP availability to all eligible farmers, nationwide. If this is not possible, expand the program eligibility to encourage farming efforts that address water quality impairments. CSP should be made available in areas such as the Chesapeake Bay, to all farmers who meet the required high levels of environmental performance.
- Expand Technical Assistance (TA) nationwide, both pre- and post-application process, and establish a comprehensive technical assistance demonstration program in the Chesapeake Bay to determine the potential outcome of enhanced technical assistance, outreach and education at levels to match need.
- Provide \$300 million annually for the Farm and Ranchland Protection Program, with block grants to states with well-established conservation easement programs.
- Reauthorize programs such as Conservation Reserve Enhancement Program (CREP) and the Wetlands Reserve Program (WRP), with increased focus on partial versus whole field, to increase focus on riparian and floodplain areas and measurable environmental improvement. Allow targeted, well-managed harvesting of cellulosic biomass from Conservation Reserve Program (CRP) lands for the purpose of generating energy while protecting water quality.
- Ensure a diversified national energy portfolio that includes the use of animal manure and cellulosic biomass to promote farm viability and protects both our air and water resources.