

Department of Legislative Services
Maryland General Assembly

FISCAL NOTE

Senate Bill 658 (Senator Stoltzfus. *et al.*)

Economic and Environmental Affairs

Nutrient Management Practices Improvement Act of 1998

This bill alters existing voluntary nitrogen-based nutrient management plans to include the level of phosphorus in the soil and the amount of nutrients applied to the land, and also establishes goals for having farm acreage enrolled in voluntary nitrogen- and phosphorus-based nutrient management plans. The bill establishes a State cost share program for modifying commercial feed mills to use phytase or other feed additives. It creates a poultry litter pilot project to transport excess poultry litter to areas of the State that are not over rich in phosphorus. An Animal Waste Technology Fund is established within the Department of Business and Economic Development (DBED). The bill provides for an income tax subtraction modification for manure spreading equipment and an income tax credit for farmers switching to commercial fertilizer from manure to comply with a voluntary nutrient management plan.

The bill takes effect on July 1, 1998.

Fiscal Summary

State Effect: General fund expenditures could increase by \$3.9 million in FY 1999. Out-year expenditures reflect mandated expenditures, one-time expenditures, annualization, and inflation. General and special fund revenues could decrease by an indeterminate amount for the next five years due to the tax credit provision with the subtraction modification for manure spreading equipment.

(in dollars)	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
GF Expenditures	\$3,850,000	\$6,470,000	\$4,820,100	\$2,361,800	\$2,431,000
GF Revenues	--	--	--	--	--
Net Effect	\$3,850,000	\$6,470,000	\$4,820,100	\$2,361,800	\$2,431,000

Note: () - decrease; GF - general funds; FF - federal funds; SF - special funds

The proposed FY 1999 operating budget includes \$4.9 million for related activities that could be used to implement this bill. The difference in expenditures resulting from this bill and

what is included in the 1999 budget and projected for future years is set forth below.

(in dollars)	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
GF Expenditures	(\$1,052,000)	\$1,459,000	(\$331,200)	(\$1,876,400)	(\$1,925,600)

Note: () - decrease; GF - general funds

Local Effect: Indeterminate decrease in local government revenues.

Small Business Effect: Meaningful impact on small business.

Fiscal Analysis

Bill Summary: The bill includes the following provisions.

- ° Establishes a State cost share program of up to 50% of eligible costs for modifying feed mills to use phytase or other feed additives. In fiscal 2000 the Governor must provide in the State budget \$350,000 for the feed mill modification cost share program. Provides for regulations on the labeling and distribution requirements for contract feed.
- ° Requires the Governor to include funding for at least 110 field personnel working for soil conservation districts beginning in fiscal 2000. Beginning in fiscal 2000 the Governor must provide in the State budget no less than \$620,000 for the employment of nutrient management planners through the University of Maryland Cooperative Extension Service.
- ° Requires the Secretary of Agriculture to adopt regulations authorizing the use of Maryland Agricultural Cost Share funds (MACS) for the construction of manure storage facilities on farms that do not have a commercial poultry operation or commercial egg laying operation. In fiscal 2000 the Governor must provide in the State budget at least \$1 million for the MACS cost share program.
- ° Requires the Maryland Department of Agriculture (MDA) to establish a poultry litter matching service to develop transfer programs and marketing techniques to promote and facilitate the transfer of poultry litter; establishes a three-year pilot project to establish a cost share program to assist in the transport of poultry litter from areas of the State that have excess phosphorus in the land; and encourages voluntary participation in the removal of poultry litter that is produced by 20% of the poultry in the four lower Eastern Shore counties; in fiscal 2000 and 2001 the Governor must

provide in the State budget at least \$1.5 million for the Poultry Litter Transportation Pilot Program, which will sunset on June 30, 2001 with any remaining funds reverting to the general fund.

- Establishes goals for the level of participation in voluntary nutrient management plans which include: 50% of farm acreage in the State by July 1, 2000; 70% of farm acreage by July 1, 2002; and 80% of farm acreage by July 1, 2005.
- Nutrient management plans will be developed based on the amount of nitrogen and phosphorus in the soil and the amount that is applied to the land in fertilizer. A nutrient management plan must be filed with MDA when developed and updated, and MDA must keep a copy for three years, protecting the identity of the plan holder.
- Certified nutrient management consultants must meet MDA requirements including a program on the proper application of nutrients.
- State cost sharing will be available to farmers that have a nutrient management plan developed by a private nutrient management consultant. The cost sharing is for 50% of the cost per acre, not to exceed \$3 per acre.
- Anyone that applies nutrients for hire must be a certified nutrient management consultant or work for one.
- Persons who apply nutrients to land that they own or manage must complete a course in nutrient application once every three years. Upon completion of the course MDA shall grant a voucher of completion. MDA shall maintain a registry of persons who have received vouchers.
- Persons who apply commercial fertilizer to more than three acres of non-agricultural land, including State land, must complete a program in commercial fertilizer application that is created and approved by MDA. Upon completion of the course MDA shall grant a voucher of completion. MDA shall maintain a registry of persons who have received vouchers.
- The Nutrient Management Advisory Committee must include representatives of the commercial lawn care, biosolids, and agricultural industries. The committee shall establish continuing education requirements for certified nutrient management consultants and for the courses in nutrient and commercial fertilizer application.

- MDA shall report to the Governor and General Assembly by December 31 of each year on the amount of farm acreage under nutrient management plans.
- Establishes a nutrient management progress assessment team, specifying its composition from State agencies, educational institutions, and affected parties and industries; the assessment team must make recommendations to the Governor and General Assembly by July 1 of each year on the progress in implementing the bill.
- Establishes an Animal Waste Technology Fund within the Department of Business and Economic Development to fund projects that develop technologies to reduce nutrients in animal waste and find alternative uses for animal waste including the transport of animal waste to other parts of the State.
- An income tax subtraction modification for the full cost of manure spreading equipment which can be carried forward for up to five years.
- A tax credit for 50% of the certified additional fertilizer cost required to convert to a nutrient management plan. The credit can be claimed for three consecutive years and may not exceed \$4,500 per year, but any excess credit can be carried forward for up to five years.

Background: During the 1997 Interim, the members of the General Assembly and a commission appointed by the Governor, the Blue Ribbon Citizens Pfiesteria Action Commission, conducted briefings and site visits to the lower Eastern Shore to discern the scientific and public policy issues regarding fish kills in lower Eastern Shore rivers in late 1996 and the Summer of 1997. Both the General Assembly and the Governor's commission focused on the role of the toxic dinoflagellate, Pfiesteria. The Governor's commission concluded a series of briefings and public meetings and issued a final report on November 3, 1997.

The report includes numerous recommendations regarding the safety of Maryland seafood, agricultural and non-agricultural nutrient management strategies, public health strategies, and future research needs. The commission pursued the causative link between Pfiesteria and agricultural practices in the lower Eastern Shore.

Of particular concern was the role of the chicken industry and the enormous quantities of chicken litter generated and ultimately applied to local fields as fertilizer for crop production.

Therefore, throughout the commission's proceedings, a primary concern was the efficacy of the State's existing nutrient management program and the feasibility of recommended changes. In its final report, the commission recommended among other things, that the State replace its voluntary, nitrogen-based, agricultural nutrient management program with a

phosphorus and nitrogen-based program. The commission further recommended that “the State enroll all farmers in nutrient management plans by the year 2000. The nutrient management plans should be fully and demonstrably implemented by 2002, contingent upon the State supplying the appropriate level of education, outreach, technical support and financial resources necessary to meet these goals”.

Chapter 137 of 1992 established a voluntary program for the regulation, certification, and licensing of persons who prepare nutrient management plans. Under this program, applicants for certification as a nutrient management consultant are required to pay the State Department of Agriculture a certification fee and those engaged in the business of providing nutrient management plans must hold a license. The Department of Agriculture encouraged farmers throughout the State to voluntarily participate in nutrient management strategies that complied with State standards. A private nutrient management consulting industry emerged to complement MDA’s and the University of Maryland’s Cooperative Extension Service’s efforts. The Department of Agriculture estimates that approximately 900,000 of the 1.7 million acres of available cropland are now covered by approved nutrient management plans.

State Effect:

Department of Agriculture

MDA general fund expenditures could increase by \$2.5 million in fiscal 1999, which reflects a 90-day start-up delay, as a result of:

- hiring two contractual employees and other start-up costs associated with the new nutrient management cost share program.

- \$900,000 in cost share funding that will be provided to farmers at a maximum of \$3 per acre to encourage the use of private nutrient management consultants rather than government consultants. MDA anticipates spending this amount in fiscal 1999 in order to start the program. However, the bill requires the Governor to provide \$1.0 million for the cost share program in fiscal 2000 only.
- \$1.5 million to fund the Poultry Litter Transportation Pilot Program, which is the amount based on the provision of the bill which requires the Governor to provide \$1.5 million for the pilot program in fiscal 2000 and 2001 and it being a three-year program that sunsets after 2001.

State expenditures could also increase in fiscal 1999 depending on the regulations that must be adopted, to provide State cost sharing funds to farmers to construct manure storage sheds that do not have a commercial poultry operation or commercial egg laying operation.

The Governor's proposed fiscal 1999 operating budget includes \$3.9 million to fund 45 new positions (31 at MDA and 14 at MDE) for nutrient management planning and water quality review. If these funds are available to implement this bill, a savings of \$1.4 million would result.

MDA expenditures could increase by \$4.8 million in fiscal 2000. The bill requires that by fiscal 2000 there be at least 110 field personnel working in the local soil conservation districts. There are currently 60 of these positions funded in the fiscal 1998 budget and included in the proposed fiscal 1999 budget. Expenditures for fiscal 2000 are summarized as follows:

- an additional 50 positions will be needed in fiscal 2000, resulting in a general fund expenditure increase of \$2.4 million in fiscal 2000. The positions include 15 Soil Conservation Planners, 5 Soil Conservation Engineers, and 30 Soil Conservation Associates to provide technical assistance to farmers to plan, design, and implement best management practices. Future year expenditures reflect (1) full salaries with 3.5% annual increases and 3% employee turnover; and (2) 1% annual increases in ongoing operating expenses.
- \$1.0 million to fund the nutrient management cost share program, as required

by the bill.

- \$1.5 million for the Poultry Litter Transportation Pilot Program, as required by the bill.

Projected expenditures in fiscal 2000 are \$4.01 million for the 45 new positions included in the fiscal 1999 budget. If funds are available, an additional \$800,000 will be required to implement this bill.

Department of Business and Economic Development

The bill establishes an Animal Waste Technology Fund which is effective July 1, 1998 and sunsets June 30, 2001. The bill requires the Governor to provide \$1 million in funding in fiscal 2000 and 2001. It is assumed that because it is a three-year program, \$1 million will be needed in fiscal 1999. The Governor's proposed fiscal 1999 budget provides \$1 million for an Animal Waste Technology Fund.

The bill also requires a State cost sharing program of 50% in order to assist in the conversion of feed mills so that phytase or other phosphorus reducing enzymes can be added to chicken feed. This will require 12 of the existing 13 feed mills in the State to be modified. Based on costs that Virginia incurred, the cost per mill would be between \$30,000 and \$60,000 with a maximum of \$720,000 being necessary for the upgrade. The State would have a maximum contribution of \$360,000. The Governor's proposed fiscal 1999 capital budget provides \$350,000 in general obligation bonds for projects of this type.

State revenues could increase by an indeterminate amount depending on the number of individuals or corporations that obtain nutrient management certificates or licenses as a result of incentive effects of the nutrient management cost sharing provision of the bill. In addition, State revenues could increase to reflect any fees charged for the courses on nutrient application and commercial fertilizer application.

University of Maryland Cooperative Extension Service

The bill provides that beginning in fiscal 2000, the Governor must annually provide \$620,000 in the State budget for the employment of contractual employees and the University of Maryland Cooperative Extension Service.

Tax Credits

Farmers are eligible for a tax credit of 50% of the cost of switching from manure to commercial fertilizer for three years after a nutrient management plan is developed and approved. The maximum credit which can be claimed in any year is \$4,500, but any excess can be carried forward for up to five years. General and special funds revenues could decline by an estimated \$1.7 million in fiscal 1999, based on the following facts and assumptions:

- approximately 1,500 farms are eligible for the tax credit;
- one-fourth of eligible farms will have a nutrient management system approved each year, beginning in 1999; and
- the maximum credit of \$4,500 will be claimed by each farm for three years.

Credits for the 375 plans approved in 1999 will be taken in fiscal 2000. At the maximum credit of \$4,500 per year, the revenue loss would be \$1,687,500. In fiscal 2001, the revenue loss would be \$3.4 million. In fiscal 2002 and 2003, the loss would be almost \$5.1 million. The total cost of this tax credit from fiscal 2000 through 2006 is estimated to be \$20.3 million.

The revenue loss will be lower to the extent that the average credit actually claimed is lower than the maximum credit, which could occur for two reasons. Some farmers' State income tax liability may not be large enough to enable them to claim the full amount of the credit; in these cases, the credits could be carried forward for up to five years, eight years after the initial credit was claimed. Other farmers simply may not require \$9,000 worth of certified additional commercial fertilizer.

To the extent that corporations claim this credit, Transportation Trust Fund (TTF) revenues would decline since about 25% of corporate income tax revenues are distributed to the TTF. All credits claimed against the individual income tax would result in general fund losses. The amount of credits which would be claimed by corporations cannot be reliably estimated at this time.

The subtraction modification for manure spreading equipment will also result in an indeterminate loss of State income tax revenues. The bill allows farmers to subtract the cost of manure spreading equipment from their income. They are allowed to take the entire cost of the equipment as a deduction. The deduction may be carried over for up to five years in order to deduct the full value of the machinery.

Local Effect: Local income tax revenues will decrease by an indeterminate amount due to the subtraction modification for manure spreading equipment because 55% of the general fund revenue loss will flow through to the local personal income tax. Local revenue will also decline for those credits claimed against the corporate income tax, since a portion of the TTF is distributed to local governments.

Small Business Effect: Many of the farmers commercial poultry producers contract with to raise poultry are small businesses. The farmers will have increased operating costs if enhanced feed has a higher cost, and is not provided by the commercial producer. All farmers using animal waste or other fertilizers will have additional costs associated with the development of, and adherence to, nutrient management plans. Some of the costs may be offset by the subtraction for manure spreaders and the tax credit for the additional costs. However, the additional costs will be paid during the year reducing the cash flow of the farm, and since they are subtracted from gross farm income to determine net farm income, there may be a number of farmers with net or taxable income too low to fully utilize the subtraction modification or tax credit to offset the increase in operating costs.

There will be additional business opportunities for individuals who qualify as Nutrient Management Consultants to develop nutrient management plans.

To the extent that nutrient runoff into the Chesapeake Bay is reduced in the future, there will be a positive impact on small business fishermen and watermen dependent on the Bay for their livelihoods.

Information Source(s): Maryland Department of Agriculture, Maryland Department of the Environment, Department of Business and Economic Development, Comptroller of the Treasury (Bureau of Revenue Estimates)

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