Department of Legislative Services
Maryland General Assembly

FISCAL NOTE

Revised

House Bill 502 (The Speaker, *et al.*)
(Administration)
Environmental Matters

Water Quality Improvement Act of 1998

This Administration bill provides for a variety of measures aimed at improving water quality throughout the State. The major provisions of the bill include: the creation of an Animal Waste Technology Fund; the use of phytase or related enzyme in chicken feed; mandatory participation in nitrogen and phosphorus based nutrient management plans; penalties for farms not participating in plans; limits on the size of swine farms; and income tax credits for farmers who must switch from using manure to the use of commercial fertilizer.

This bill takes effect July 1, 1998. The Animal Waste Technology Fund sunsets on June 30, 2001. Any funds remaining will be paid into the general fund.

Fiscal Summary

State Effect: The Governor's proposed FY 1999 operating budget includes $4.9 million to implement this bill. The proposed capital budget includes $350,000 in general obligation bonds. Fee revenue from licensing and certification of nutrient applicators (farmers) and commercial nutrient applicators is estimated at $680,000 biannually beginning in FY 1999. General and special fund revenues could decrease by an indeterminate amount for the next five or more years due to the tax credit provision and the subtraction modification for manure spreading equipment. State revenues could increase by an indeterminate amount as a result of the penalty provisions.

Local Effect: Indeterminate decrease in local government revenues.

Small Business Effect: A small business impact statement was not provided by the Administration in time for inclusion in this fiscal note. A revised fiscal note will be issued when the Administration's assessment becomes available.

Fiscal Analysis

Bill Summary: The bill includes the following provisions:

- establishes the Animal Waste Technology Fund within the Department of Business and Economic Development (DBED) for the purpose of funding projects that develop technologies to help reduce the amount of nutrients in animal waste and finding alternative uses for animal waste. The Animal Waste Technology Fund sunsets on June 30, 2001. The fund may consist of money appropriated by the State, federal grants, income from investments, interest from loans, application fees, and any other money made available;

- requires the use of phytase or other phosphorus reducing enzymes in all contract chicken feed by January 1, 2000;

- nutrient management plans must take into account both nitrogen and phosphorus levels in the soil and in any fertilizers used. Nutrient management plans must be developed by persons certified or licensed by the State. The Maryland Department of Agriculture (MDA) must approve all plans, and keep a copy of all plans for three years. Approval of the plan is contingent on the Maryland Department of the Environment (MDE) or MDA being allowed to inspect the farm for compliance with the plan;

- all farms of 11 or more acres must have an approved nitrogen and phosphorus based nutrient management plan by July 1, 2000 and must be implementing the plan by July 1, 2002;

- the existing Nutrient Management Advisory Committee must include representatives from commercial lawn care, biosolids, and agricultural fertilizer industries and shall establish guidelines and requirements for certified nutrient management consultants and certified nutrient applicators;

- an annual report to the Governor and the General Assembly on the amount of farm acreage covered by nutrient management plans and an evaluation of the plans;

- MDE in consultation with MDA must adopt regulations to limit the size of hog farms, excluding farms that are already in existence when the regulations take effect;

- 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 commercial fertilizer costs 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; and

- administrative and civil penalties for violating specific provisions of the bill.

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: The Governor's proposed operating budget for fiscal 1999 includes $13.8 million more than was appropriated in fiscal 1998 for water quality improvement purposes. Of this amount, $4.9 million is directly targeted at implementing this bill. The money is allocated to three different agencies for operating costs as well as for capital projects. The allocation by agency follows.

Department of Agriculture

The Governor's proposed fiscal 1999 budget includes 31 positions for nutrient management planning and water quality review teams at a total cost of $3,299,000. Three of these 31 positions were approved by the Board of Public Works in October 1998 to assist in water quality assessment. Of the remaining 28 positions, 15 will provide assistance to the local soil conservation districts, eight will make up the MDA portion of the water quality assessment teams, four will be involved in nutrient management planning, and one will provide administrative support to the Maryland Agricultural Cost Share (MACS) program.

Currently, 50% of all nutrient management plans are developed by approximately 350 private sector consultants. MDA assumes that this practice will have to continue in order to reach the goals set forth in the bill. It is not expected that the number of private consultants will change significantly in subsequent years.

According to the 1996 Maryland Agricultural Statistics Survey, there are approximately 13,700 farms in Maryland, including small and part-time farms, which may be applying nutrients and thus would be required to be certified. Based on the current pesticide regulation program, it is estimated that 1,800 individuals will need to be certified biannually as commercial nutrient applicators which will result in $180,000 in additional revenue (1,800 x $100 certification fee). Commercial nutrient applicators apply nutrients for hire on agricultural and non-agricultural land. Also, it is estimated that approximately 10,000 farmers will have to be certified biannually as nutrient applicators, resulting in $500,000 (10,000 x $50 certification fee) every two years. In total, fee revenues could increase by about $680,000 every two years beginning in fiscal 1999.

Department of Business and Economic Development

The proposed fiscal 1999 operating budget provides DBED with $1 million in general funds to capitalize the Animal Waste Technology Fund. In addition, the capital budget provides $350,000 in general obligation bonds for capital improvements on existing feed mills (phytase provision). The Governor's Office advises that $1 million will be contributed to the Animal Waste Technology Fund in fiscal 2000 and 2001 as well. DBED could administer the fund with existing budgeted resources.

Department of the Environment

The Governor's fiscal 1999 budget includes 11 positions to deal with pfiesteria related initiatives at a total cost of $603,000. Eight of these positions are for inspection teams in the Water Management Administration to investigate agricultural practices in conjunction with MDA. The other three positions were approved by the Board of Public Works in October 1998 to assist in water quality assessment.

Operating Expenditure Summary for State Agencies

(in dollars)	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
GF Expenditures *	$4,902,000	$5,011,000	$5,151,300	$4,238,165*	$4,356,641

*Note: ( ) - decrease; GF - general funds; * - Animal Waste Technology Fund sunsets June 30, 2001*

Penalty Provisions

Due to the penalty provisions of the bill for non-compliance with a nutrient management plan, there is a potential indeterminate increase in State revenues. The bill includes the following monetary penalties:

- $250 MDA administrative penalty for preparing a nutrient management plan without being certified or licensed by the State;

- $250 MDA administrative penalty for individuals applying nutrients without being a certified nutrient MDA applicator;

- maximum $500 civil penalty and a $250 MDE administrative penalty for each violation not exceeding $5,000, for not implementing a nutrient management plan by July 1, 2002;

- a lien may be placed on any land for failure to any penalty imposed;

- revocation of any cost-sharing funds received; and

- maximum $1,500 civil penalty for a first violation and no more than $2,500 for a subsequent violation, not exceeding $15,000, for individuals applying commercial fertilizer in a manner inconsistent with the guidelines established for nutrient management plans in the bill. These individuals can have their certification revoked or suspended in addition to being subject to civil penalties.

Any revenue increase will be determined by the number of violations cited and the amount of the fines levied, which cannot be reliably estimated at this time. However, MDA and MDE advise that penalties would only be sought as a last resort.

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 in a year.

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.

Information Source(s): Maryland Department of Agriculture; Maryland Department of the Environment; Department of Business and Economic Development; Department of Natural Resources; Comptroller of the Treasury (Bureau of Revenue Estimates); Allegany, Dorchester, Queen Anne's, and Wicomico counties

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