HB 300

Department of Legislative Services

Maryland General Assembly

FISCAL NOTE

House Bill 300 (Delegate Hubbard, *et al.*)
Environmental Matters

Water Quality - Agricultural Practices and Best Management Systems

This bill provides for a variety of measures to improve water quality in critical watersheds of the State through the implementation of best management systems.

The bill takes effect on October 1, 1998.

Fiscal Summary

State Effect: General fund expenditures could increase by $7.6 million in FY 1999. Out-year expenditures reflect annualization and inflation. Potential indeterminate increase in State property tax revenues beginning in FY 2002.

(in dollars)	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
GF Expenditures	$7,611,500	$7,824,600	$8,043,700	$8,268,900	$8,500,400
GF Revenues	0	0	0	---	---
Net Effect	$7,611,500	$7,824,600	$8,043,700	$8,268,900	$8,500,400

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. Expenditures resulting from this bill which are in excess of what is included in the 1999 budget and projected for future years are set forth below.

(in dollars)	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
GF Expenditures	$2,709,500	$2,813,600	$2,892,400	$4,030,700	$4,143,800

Local Effect: Potential increase in local government expenditures. Potential indeterminate increase in local property tax revenues beginning in FY 2002.

Small Business Effect: Meaningful impact on small businesses.

Fiscal Analysis

Bill Summary: The bill includes the following provisions.

- requires commercial poultry producers to: (1) use feed that contains phytase or other phosphorous reducing enzyme, to the extent that is commercially available, to reduce the amount of phosphorus in poultry waste; and (2) add iron sulfate or related material to poultry litter to help control the amount of nitrogen and phosphorus in runoff;

- establishes goals for voluntary participation in using best management systems and mandates participation if goals are not met. Best management systems consist of a nutrient management plan, a soil conservation and water quality plan, and a nutrient budget;

- if 75% of the farm acreage in a critical watershed is not under best management systems by July 1, 2000, then: by July 1, 2001 all farms in the watershed on which a "concentrated animal feeding operation" is conducted or on which manure is applied must have and be implementing a best management system; and by July 1, 2003 all farms in the watershed must have and be implementing a best management system;

- if 75% of the farm acreage in a critical watershed is under best management systems by July 1, 2000, and if 100% of farm acreage in the watershed is not under best management systems by July 1, 2002, then: by July 1, 2003, all farms in a critical watershed on which a concentrated animal feeding operation is conducted or on which manure is applied must have and be implementing a best management system; and by July 1, 2005, all farms in the watershed must have and be implementing a best management system;

- if 100% of the farm acreage in all critical watersheds is not under best management systems by July 1, 2006, all farms in the State must have and be implementing a best management system by July 1, 2007;

- any farmland converted to silviculture or planted in trees after July 1, 1998 will be considered to have a best management system;

- best management systems must be: (1) developed by local soil conservation districts, University of Maryland Cooperative Extension Services (CES), or consultants certified by the Maryland Department of Agriculture (MDA); (2) approved by the soil conservation district or CES; and (3) filed with MDA. MDE may audit approved plans;

- farms with an approved best management system are subject to a compliance inspection by MDE, the soil conservation district, or CES;

- MDE will aggregate all poultry farms that raise poultry for a single producer in a critical watershed in order to issue a consolidated discharge permit to the producer;

- land in a critical watershed will not qualify for assessment as farm or agricultural land if by July 1, 2002, 100% of the land in the watershed is not under an approved best management system and is not implementing it according to schedule;

- the Maryland Agricultural Land Preservation Foundation may only purchase easements on land in critical watersheds that is under and implementing approved best management systems;

- in order to qualify for cost sharing projects under the Maryland Agricultural Cost Share (MACS) program, a farm in a critical watershed must be under and implementing an approved best management system as certified by the local soil conservation district; and

- requests the Governor to: (1) target funds that are received under the Conservation Reserve Enhancement Program to farms in critical watersheds that are implementing best management systems; (2) coordinate the use of State and federal funds to best improve the Chesapeake Bay; (3) establish a linked deposit program between MDE and financial institutions under the Water Quality Revolving Loan Fund; (4) continue research on phosphorous, including a phosphorus index, composting of animal waste, and the marketing of product derived from animal waste; (5) support and fund efforts to sustain agricultural practices that will provide a fair standard of living to those involved while reducing the risk of environmental degradation; and (6) study the relationship between water pollution by nutrients, agriculture production and effects on human health.

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: All areas of the State, except for a small portion of Garrett County, are considered to be in a critical watershed. A best management system consists of a soil

conservation and water quality (SCWQ) plan, a nutrient management plan, and a nutrient budget. Currently, 42% of agricultural land in the State is under a SCWQ plan. Therefore, the remaining 58% of cropland and pastureland will need to be under an SCWQ plan in the next four years in order for the landowner to remain eligible for the agricultural tax assessment, cost-sharing for best management practices (BMP), and selling agricultural land easements.

Sixty percent of agricultural land is currently under a nutrient management plan; the remaining 40% of land will need plans. MDA estimates that approximately 250,000 acres of the land currently under a plan will need to be updated to take phosphorus levels into account. This estimate is based on the bill providing for the use of the best scientific information available. Therefore, phosphorus levels in other acreage will be able to be addressed as scientific data becomes available.

Maryland Department of Agriculture

MDA estimates that general fund expenditures could increase by an estimated $6.6 million in fiscal 1999, which accounts for the bill's October 1, 1998 effective date, for 65 permanent positions. This estimate reflects the cost of hiring six Soil Conservation Engineers, four Nutrient Management Specialists, two Soil Conservation Specialists, and two Water Quality Specialists to conduct farm inspections; and two administrative personnel for record keeping. Twenty-five Soil Conservation Planners will be required to evaluate site specific natural resource conditions and recommend appropriate best management practices (BMPs). Forty Soil Conservation Technicians will be needed to survey, design, and supervise implementation of recommended BMPs during the 10-year life of each plan. It includes salaries, fringe benefits, one-time start-up costs, and ongoing operating expenses. 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.

This estimate also includes funding for 87 contractual positions. Fifty-seven of these will be used to accelerate available technical assistance in order to avoid regulatory penalties in the local soil conservation districts. Another 30 will be needed at the University of Maryland Cooperative Extension Service to provide planning assistance. It also includes $250,000 for an incentive program aimed at attracting private nutrient management consultants.

The Governor's proposed fiscal 1999 budget allocates $3.3 million for 31 positions at MDA to assist in developing and implementing nutrient management systems and water quality plans. Assuming these funds are used to implement this bill, MDA's expenditures would be $3.3 million in excess of what is included in the proposed fiscal 1999 budget.

Maryland Department of the Environment

The bill requires MDE to perform the following activities.

- prepare and submit to the Governor a nutrient management budget for all farm acreage in each critical watershed by January 31, 2000;
- establish acreage covered by best management systems in each critical watershed to assess compliance with the bill and publishing compliance data in January 2000, 2002, 2006;
- inspect farms for the purpose of determining compliance with the bill;
- aggregate the operations of all poultry producers that are producing poultry for a single producer and issue a consolidated discharge permit to that producer; and
- make recommendations to MDA for the recovery of cost-share funds for farms not in compliance.

The bill also authorizes MDE to establish regulations which provide for the full implementation of permitting, inspection, and compliance requirements.

MDE general fund expenditures could increase by an estimated $873,600 in fiscal 1999, which accounts for the bill's October 1, 1998 effective date, for 19 permanent positions. This estimate reflects the cost of hiring 11 Sanitarians, two Natural Resource Planners, five Public Health Engineers, and one Data Processing Specialist to perform the activities listed above. It includes salaries, fringe benefits, one-time start-up costs, and ongoing operating expenses. 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.

The Governor's proposed fiscal 1999 operating budget provides $603,000 for 11 new positions at MDE that could perform many of these requirements. Assuming these funds are used to implement this bill, MDE's expenditures would be $270,600 in excess of what is included in the proposed fiscal 1999 budget.

The Department of Natural Resources

DNR will have to increase its efforts in the areas of water quality monitoring, assessment, and modeling in order to provide the analysis necessary to target critical watersheds. It will also have to participate in research into the relationship between pollution and human health. General fund expenditures could increase by $137,878 in fiscal 1999 for three contractual positions (two analytical modelers and one biologist) to assist in carrying out the provisions of the bill. It includes salaries, one-time start-up costs, and ongoing operating expenses. 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.

Department of Assessments and Taxation

The Department of Assessments and Taxation advises that its expenditures could increase by $557,600 in fiscal 1999 for 23 new positions to assess agricultural land and determine compliance with best management systems. However, the Department of Legislative Services (DLS) advises the bill does not require the State Department of Assessments and Taxation (SDAT) to monitor compliance with best management systems. Because MDE and MDA will be fulfilling this function, DLS believes that SDAT could handle potential reassessments with existing resources.

At the present time it is difficult to determine any increase in State and local property revenues that could result from farmland being assessed at market value due to noncompliance with the bill.

Local Effect: Howard County advises that its expenditures could increase by $79,850 in fiscal 1999 to hire two planning specialists to assist the local soil conservation district to develop, implement, and monitor SCWQ plans. Talbot County estimates that expenditures could increase by $2,000 for increased staff time in order to review prospective districts for easement purchases.

Small Business Effect: Many of the farmers that contract with commercial poultry producers to raise poultry are small businesses. Because there will be a consolidated discharge permit that the commercial poultry producer will hold, there may be additional, and possibly significant, involvement of the commercial poultry producers in the operations of contract farmers encompassing not only feed, but storage and disposal of poultry waste, and application of poultry waste to the farmer's land.

The small farmers may also have increased costs if feed is not provided by the commercial poultry producer but sold to them, and the enhanced feed has a higher cost. All farms using

animal waste or other fertilizers will have additional costs associated with the development of, and adherence to, best management systems to reduce nutrient runoff. In addition, some farmers could incur the cost of installing a BMP and implementing a best management system.

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; University System of Maryland; Department of Natural Resources; Department of Assessments and Taxation; Howard, Talbot, and Queen Anne's counties

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