

**Department of Legislative Services**  
 Maryland General Assembly  
 2016 Session

**FISCAL AND POLICY NOTE**  
**First Reader**

Senate Bill 876 (Senator Serafini)  
 Education, Health, and Environmental Affairs

**Natural Resources - Black Fly Management and Control - Washington County**

This bill requires the Department of Natural Resources (DNR) to implement a program to control the spread of black flies in the State. The program is implemented initially in Washington County on (1) State-owned property; (2) property owned by a local government with consent of the local government; and (3) private property with consent of the property owner. DNR must adopt regulations to implement the bill.

**Fiscal Summary**

**State Effect:** General fund expenditures increase by \$112,250 in FY 2017 for personnel and other operating costs. Future years reflect annualization and inflation and the hiring of additional contractual personnel in FY 2020 and 2021. The cost of treatment operations and potential sampling and biomonitoring costs cannot be reliably estimated and are not accounted for, but may be more than \$100,000 annually. Special fund revenues and expenditures may increase, shifting a portion of the costs from general funds to special funds, to the extent counties or other sources contribute to the cost of the program.

| (in dollars)   | FY 2017     | FY 2018     | FY 2019     | FY 2020     | FY 2021     |
|----------------|-------------|-------------|-------------|-------------|-------------|
| SF Revenue     | -           | -           | -           | -           | -           |
| GF Expenditure | \$112,500   | \$101,400   | \$105,100   | \$177,800   | \$205,500   |
| SF Expenditure | -           | -           | -           | -           | -           |
| Net Effect     | (\$112,500) | (\$101,400) | (\$105,100) | (\$177,800) | (\$205,500) |

*Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate effect*

**Local Effect:** Washington County expenditures may increase to the extent the county contributes to the cost of the program. Expenditures in other counties that participate in the program in future years may similarly increase. Local revenues are not affected.

**Small Business Effect:** Potential meaningful.

## Analysis

**Bill Summary:** DNR, in conjunction with the University of Maryland's Department of Entomology, may:

- treat the property with an aerial spraying or backpack spraying of *Bacillus thuringiensis israelensis*;
- conduct field studies to determine the need for, location, and timing of spraying;
- schedule spraying when the conditions are optimal for ingestion by the black flies;
- notify appropriate persons of the date and location of an upcoming spraying;
- review the effectiveness of the spraying; and
- conduct biomonitoring of aquatic macroinvertebrates and fish in selected streams to ensure there is no impact on the environment.

DNR may accept, use, or expend any aid, gift, or grant made available from any private or public source to implement the provisions of the bill.

### **Current Law/Background:**

#### *Pest Management in Maryland*

Pest management programs, under the direction of the Maryland Department of Agriculture (MDA), address plants and insects that are considered dangerous or nuisances. Gypsy moth control is a major focus of the State's forest pest management program. Since 1980, the gypsy moth has defoliated more than one million acres in the State. State officials monitor and assess forest insect and disease situations and determine the appropriate application of aerial pesticides. The cost of providing gypsy moth services is shared among the federal, State, and local governments as well as private landowners. MDA did not spray for gypsy moth in 2015. Only 612 acres of gypsy moth defoliation occurred in 2015, mostly on the Eastern Shore and in counties that do not participate in the Cooperative Gypsy Moth Program. Only four acres of defoliation occurred in Southern Maryland. The Governor's proposed fiscal 2017 budget includes \$917,000 in general funds, \$115,000 in special funds (county and other participation), and \$304,000 in federal funds for forest pest management.

Mosquito control efforts are also shared between the State and local governments. The department can enter into agreements with local governments to construct or maintain facilities (such as ditches or dams) or use insecticides to reduce the mosquito population, with the costs shared by the State and local government. The State fully funds mosquito control activities on State-owned land, with primary attention paid to State parks. While funding is often shared between the State and local governments, mosquito control

activities are generally conducted by MDA. In 2014, MDA treated 1.1 million acres statewide. The Governor's proposed fiscal 2017 budget includes \$1.0 million in general funds and \$1.6 million in special funds (county and other participation) for mosquito control.

### *Pennsylvania Black Fly Suppression Program*

Pennsylvania's Black Fly Suppression Program, administered by the Pennsylvania Department of Environmental Protection (DEP) involves monitoring and treatment of over 1,500 miles of rivers and streams. The program is implemented by DEP biologists and student interns who conduct monitoring, laboratory identification of samples, data entry, treatment operations, and management of contracts for aerial spraying done by helicopter. Treatments use *Bacillus thuringiensis israelensis*, which DEP indicates is a naturally occurring soil bacterium. According to DEP, black flies are much smaller than house flies. They are often referred to as gnats and swarm around the heads of people on warm days. The state and counties share the cost of treatment operations, while DEP covers all administrative and monitoring costs. The Pennsylvania Governor's proposed 2016-17 budget includes \$3.3 million for black fly control and research and an additional \$725,000 in county contributions.

### **State Fiscal Effect:**

#### *General Fund Expenditures*

General fund expenditures increase by \$112,530 in fiscal 2017, which accounts for the bill's October 1, 2016 effective date. This estimate reflects the costs of hiring a biologist and a contractual seasonal employee within DNR to implement the program in Washington County. It includes salaries, fringe benefits, one-time start-up costs, and ongoing operating expenses. The estimate does not include the cost of treatment operations and potential costs for sampling and biomonitoring, which cannot be reliably estimated at this time but may be more than \$100,000 annually. The University of Maryland's Department of Entomology is expected to participate in the program using existing resources.

DNR indicates that existing personnel cannot absorb the workload of implementing the program and do not have the necessary biological knowledge of the black fly. The hired biologist handles administrative duties and assists with field work, including contracting for treatment operations. The contractual seasonal employee performs field work, including locating areas to spray, contacting landowners, assisting with treatment operations, and conducting monitoring of the effectiveness of the treatment operations and impacts on aquatic macroinvertebrates and fish.

|                                   |                  |
|-----------------------------------|------------------|
| Positions                         | 1.75             |
| Salaries and Fringe Benefits      | \$61,974         |
| Vehicles                          | 37,000           |
| Other Operating Expenses          | <u>13,556</u>    |
| <b>FY 2016 State Expenditures</b> | <b>\$112,530</b> |

Future year expenditures reflect salaries with annual increases and employee turnover, annual increases in ongoing operating expenses, two additional contractual seasonal employees starting in fiscal 2020, and one additional contractual seasonal employee starting in fiscal 2021. The additional contractual seasonal employees reflect expansion of the program beyond Washington County.

According to information provided by the Pennsylvania DEP in calendar 2015, black fly suppression efforts need to be focused on larvae in the water. It is unclear how the bill's limitation of the initial implementation of the program in Washington County to State-owned property and other property with the property owner's consent might limit the operations of the program. DEP's program, a much larger operation, uses the movement of the water in rivers and streams to spread the treatment and, while it provides various notifications, it does not contact each individual adjacent property owner; to do so would not be feasible.

The increase in general fund expenditures may be reduced to the extent special funds cover a portion of the cost of the program, as discussed below.

*Special Fund Revenues and Expenditures*

To the extent Washington County (and other counties in future years), or other private or public sources, contribute to the cost of the program, special fund revenues and expenditures increase. Any special funds available for the program reduces the need for general funds, as discussed above.

**Local Expenditures:** Washington County expenditures may increase to the extent the county contributes to the cost of the suppression efforts, similar to the forest pest management and mosquito control programs in Maryland and the Pennsylvania black fly suppression program. In future years, expenditures may similarly increase in other counties in which the program is implemented.

**Small Business Effect:** To the extent small businesses are contracted with to carry out treatment operations, one or more small businesses may be meaningfully impacted by the bill.

## **Additional Information**

**Prior Introductions:** SB 801 of 2015 received an unfavorable report from the Senate Education, Health, and Environmental Affairs Committee. Its cross file, HB 1169, received an unfavorable report from the House Environment and Transportation Committee.

**Cross File:** HB 870 (Delegate Parrott) - Environment and Transportation.

**Information Source(s):** Department of Natural Resources, University System of Maryland, Maryland Department of Agriculture, Pennsylvania Department of Environmental Protection, Department of Legislative Services

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Analysis by: Kathleen P. Kennedy

Direct Inquiries to:  
(410) 946-5510  
(301) 970-5510