## Department of Planning and Budget 2022 Fiscal Impact Statement

1.	Bill Number	r: SB171					
	House of Orig	in 🗌	Introduced	$\boxtimes$	Substitute		Engrossed
	<b>Second House</b>		In Committee		Substitute		Enrolled
2.	Patron:	Peake					
3.	Committee:	Education and Health					
4.	Title:	Department of Health; harmful algal bloom mitigation.					

- **5. Summary:** That the Virginia Department of Health (VDH) and the Department of Environmental Quality (DEQ) shall develop a harmful algal bloom mitigation plan for Lake Anna through or in conjunction with a public institution of higher learning and other organizations as deemed necessary.
- **6. Budget Amendment Necessary**: See item 8.
- 7. Fiscal Impact Estimates: Preliminary, see item 8.
- **8. Fiscal Implications:** The provisions of this legislation would have a fiscal impact on the Commonwealth, however the full amount cannot be determined at this time.

## Virginia Department of Health

The provisions of the bill require VDH and DEQ or in conjunction with a public institution of higher learning to develop a harmful algal bloom (HAB) mitigation plan for Lake Anna. VDH does not currently have the resources for research and development of a mitigation plan. VDH would need to contract with an outside entity for research in order to understand HABs in Lake Anna to develop a mitigation plan. VDH would need to contract for the following: water sampling, algal and toxin analyses, development of a data inventory and analysis of historical data, continuous water quality monitoring stations in various sections of the lake, and the development of an initial model to predict HABs.

VDH received a quote from the Virginia Institute of Marine Science (VIMS) in 2020 for similar contractual services on Lake Anna; the quote was \$400,000 for a two year study. In order to adequately develop a mitigation plan, data will need to be collected for several years. Since costs have significantly increased since the quote was obtained, other academic institutions or organizations may require more funds than what VIMS previously provided. Given the time frame to obtain a quote from an academic institution, VDH based the fiscal impact on the previous quote obtained from VIMS and increased costs by \$25,000 annually due to the anticipated increase in laboratory supplies, testing equipment, and staff costs. The annual cost estimate for this project is estimated at \$225,000 per year for a four year period in

order to establish a HAB mitigation plan for Lake Anna. However these estimates are preliminary and based on old estimates.

In addition to contractual services, VDH will need general fund support for a toxicologist (half a position). The toxicologist will collaborate with DEQ and oversee the contractual services to meet the provisions of the bill. VDH estimates this position would cost \$67,250 annually including salary and fringe.

The total annual fiscal impact for VDH is \$292,250 from the general fund. VDH does not have the ability to absorb this additional workload within existing resources.

## Department of Environmental Quality

The impact on the Department of Environmental Quality is indeterminate. DEQ interprets the requirement to develop a plan as requiring a study similar to what will be carried out in the Shenandoah River. The Governor's introduced budget includes \$313,013,000 from the general fund to be deposited to the Virginia Water Quality Improvement Fund established under the Water Quality Improvement Act of 1997. Of this amount, \$2,500,000 is provided to the Department of Environmental Quality, collaborating with the Department of Health, to conduct a Shenandoah River Harmful Algal Bloom study (Item 374 B.1.). While DEQ does not have an estimate at this time, they would need additional resources to develop a harmful algal bloom mitigation plan. Any additional resources would be required in Item 378.

## Virginia Institute of Marine Science

A Biological Safety Laboratory – Level 3 (BSL-3) is needed for research on algal blooms due to the toxins created by the algae. While the bill does not specify which public institution of higher education shall work in conjunction with VDH, the Virginia Institute of Marine Science (VIMS) has the appropriate BSL-3 laboratory space and research staff familiar with algal blooms to assist with the proposed mitigation plan. It is anticipated a budget amendment would be needed to cover the costs associated with research completed by VIMS, or any other public institution, to inform the proposed mitigation plan. At this point, the specific costs are indeterminate.

- **9. Specific Agency or Political Subdivisions Affected:** The Virginia Department of Health, the Department of Environmental Quality, and Virginia Institute of Marine Science.
- 10. Technical Amendment Necessary: No.
- 11. Other Comments: None.