



## FY 2019 Recommended Budget Budget Question

Board Question #: 26

**BUDGET QUESTION:** Page 53 of the summarized version of the budget document mentions mussel farming. Please provide details of this operation.

**RESPONSE:** This project is mentioned as an element of the adopted Comprehensive Stormwater Management Plan document, with the high altitude goal to build upon Spotsylvania's nutrient credit banking as a preventive shield against future Department of Environmental Quality (DEQ) nutrient emission thresholds called total maximum daily loads (TMDLs) and Best Management Practices (BMP), retrofitting to meet any future mandates of increasing lower phosphorus pollutant emission standards set by the EPA, Region 3 on Spotsylvania County.

Also, the commercial or industrial land developer must at times buy nutrient credits available through open market commercial brokerage wetland banks (\$20-25,000 per pound of nutrient credit) in order to comply with the Virginia Stormwater Act and local codes, but having a local County nutrient bank log is perhaps the first of its kind, and provides local banking of credits within Spotsylvania-owned properties, which can be used for County construction projects in the watershed, and possibly an economic incentive tool.

The project is also an educational outdoor laboratory tool that our County schools could use for SOL credits for environmental education. The project is designed to test water quality before entering the mussel pond and water quality exiting the pond into Massaponax Creek by our academic partners, Dr. Bass of University of Mary Washington and VA Tech, Biological Systems Engineering students. Once completed, the project will generate additional nutrient credits to be added to the County log of nutrient credits for future trading or use.

The pond planned for use is an old, long abandoned County sewage lagoon on the rear of the Loriella Park property, and will be retrofitted to create an eco-system viable for freshwater mussels that have disappeared from the natural stream environment in our County according to Dr. Bass.

Any funding associated with this program comes from Stormwater Management Program fees which can be used only to support the County's Stormwater Management Program, of which mussel farming is one aspect.

Attached is a project progress report from the Virginia Tech students participating in this project. Staff plans to meet with State officials in April to determine any permits required by the Army Corps of Engineers, DEQ, Department of Game and Inland Fisheries, or other regulatory agencies with field work to occur late this summer or early fall.