



Alexandria's Poop Problem: An Update

By Dean Amel

In the last issue of the Mount Vernon Group's newsletter, I described the problems caused by the combined sewer system that serves about 500 acres of Alexandria. This system combines storm and sanitary sewers and sends all of the combined flow to Alexandria's sewage treatment plant. After any substantial rain, the volume of storm runoff overwhelms the treatment plant, and raw or partially treated sewage is discharged into local waterways through four outfall pipes. In recent years, this has happened about 60 times per year.

Under court order to correct that assault on local water quality, Alexandria has just submitted a Long Term Control Plan (LTCP) to the Virginia Department of Environmental Quality. This plan proposes to eliminate, in most cases, sewage discharges from three of the city's four outfall pipes, all of which empty into the Great Hunting Creek watershed. However, the proposed plan does almost nothing to prevent future discharges from the fourth outfall. The fourth pipe empties into Oronoco Bay at the end of Pendleton Street and carries about half of the volume from all four pipes.



The effect of dumping sewage into Oronoco Bay is major. Under state standards, no more than 10% of the water samples that Alexandria takes from Oronoco Bay should have more than 235 *E. coliform* bacteria colony forming units (CFU) per 100 milliliters of water. Alexandria's testing has found that this level is often exceeded, even during dry weather, and during sewage discharges can be as high as 14,000 CFU/100 ml. This level of bacterial pollution poses a health risk

to anyone who happens to be splashed by river water while kayaking, rowing crew or otherwise being exposed to water in Oronoco Bay or downriver in the Potomac.

In its proposed LTCP, Alexandria seeks to address this health problem by separating storm from sanitary sewers as parts of the city are redeveloped and through green infrastructure projects that reduce stormwater runoff. However, these measures are estimated to correct less than 10% of the problem over the next 20 years. Alexandria proposes to defer further action until 2038 or later, exposing another generation to dangerous human waste.

Readers are encouraged to [contact Alexandria's mayor and City Council](#) and ask them to act now to clean up all discharges of human waste into the Potomac and its tributaries. Anyone interested in working on this issue is urged to contact the author at damel@alum.mit.edu.

This content originally appeared in the September 2016 issue of the Mount Vernon Sierran, the Mount Vernon Group's quarterly newsletter. For more information about the Mount Vernon Group, please visit virginia.sierraclub.org/mvg/.