

CITY OF ALEXANDRIA'S COMBINED SEWER SYSTEM OVERFLOW CONTROL PROGRAM

WHAT IS COMBINED SEWER OVERFLOW?

During dry weather conditions, the sewage from homes and businesses is taken to the wastewater treatment plant operated by the Alexandria Sanitation Authority. There, the wastewater is treated to remove pollutants before being discharged to the Potomac River.

During periods of heavy rainfall or snowmelt, wastewater volume in a combined sewer system can exceed the capacity of the sewer system or treatment plant. To prevent flooding and damage to the system, combined sewer systems are designed to overflow occasionally and discharge excess wastewater directly to nearby streams, rivers, or other water bodies. The excess flow is called combined sewer overflow (CSO). In Alexandria, overflows

discharge into the Potomac River, Hunting Creek, and Hooff's Run.



Hooff's Run outfall

WHAT IS THE CITY DOING?

In order to continually control CSO discharges, the City has implemented a number of programs ranging from weekly inspections to regular sewer and street cleaning and litter control. These programs have proven effective in minimizing any water quality impacts from CSOs.

The City has also posted signs at each CSO outfall stating that persons should avoid contact with the water in the vicinity of the outfall during or after a heavy or long wet weather event.

The City of Alexandria has implemented the EPA's Nine Minimum Controls, which are technology-based measures designed to reduce the number of CSOs and improve the water quality. The Nine Minimum Controls are listed in the table below along with a brief description of the actions taken by the City.

Notice sign at Royal Street outfall



Pendleton Street outfall

The City and the Virginia Department of Environmental Quality have conducted extensive studies and continually monitor the City's combined sewer system. These studies have shown that there are only a few occasions when the overflows might contribute to reducing water quality conditions.

NINE MINIMUM CONTROLS		ACTIONS
1	Proper operation and regular maintenance programs for the sewer system and the CSOs	- Regular sewer flushing - Regular CCTV inspection of sewers - Regular catch basin cleaning program
2	Maximum use of the collection system for storage	- Sewer relining projects to reduce inflow and infiltration - Onsite stormwater retention required for new development
3	Control of non-domestic discharges	- Alexandria Sanitation Authority administers an industrial pretreatment program under its VA Pollutant Discharge Elimination System permit
4	Maximize flow to the local wastewater treatment plant	- Diversion facilities inspected regularly inspected and maintained
5	Prohibit CSOs during dry weather	- Regular inspections - 24 hour on-call response team for reported dry weather overflows
6	Control of solid and floatable materials in CSOs	- Regular sewer flushing and catch basin cleaning - Use of hooded catch basins - Regular leaf season pickup, street cleaning program, stream cleanups
7	Pollution Prevention	- Recycling and Industrial waste reduction - Best Management Practices for auto-related industries
8	Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts	- Posted signs at outfalls - Public information bulletin available
9	Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls	- Monitoring program for the CSS in accordance with the City's VPDES permit

City staff inspecting the Pendleton Street outfall

