

policies. Possible measures to meet the goal for mobile sources of carbon monoxide and ozone may include: the introduction of California standards for new vehicle emissions, more stringent vehicle inspection programs, gasoline pump vapor recovery nozzles, and reformulated gasoline. Policies to increase transit service, carpooling, non-motorized means of travel, and to decrease auto travel may be included in the strategy. New roadways and transit projects will be evaluated as part of a system that must demonstrate reduced vehicle emissions. These requirements will foster an increased regional emphasis on land use and transportation planning, and their relationship to air quality.

* **Emissions from point sources of pollution must be reduced as well.** Measures to reduce emissions from point sources of ozone and carbon monoxide include changes to the chemical composition of polluting solvents and paints, and the introduction of pollution control devices on small stationary sources such as bakeries.

12. DRINKING WATER

The Washington Suburban Sanitary Commission (WSSC) provides much of the County's drinking water. The city of Rockville and the town of Poolesville have separate water supply systems. Residents in low-density residential areas and the agricultural reserve are served by private wells.

Regional cooperation is essential to ensure that the water supply obtained from the Potomac and Patuxent Rivers is safe and adequate. Since all drinking water must be reliably treated and distributed, the WSSC must construct facilities in conjunction with development and maintain the entire treatment and distribution system.

Current sources of raw drinking water and the capacity to store, treat, and distribute it are limited. Therefore, at some point in time, new sources or changes in current usage patterns will be necessary to serve long-term regional population growth. The maintenance and improvement

of surface water quality serves to increase the potential supply while reducing treatment costs.

* **The State requires all counties to adopt Comprehensive Ten-Year Water and Sewerage Plans.** Montgomery County's Comprehensive 10-Year Water and Sewerage Systems Plan is a functional plan that guides the extension of public water and sewer service to implement approved and adopted master plans. The plan designates six categories (1-6) for water (W) and sewer (S) service. A designation of W-1/S-1 indicates that a property is connected to or abuts community or WSSC water and sewer systems. A designation of W-6/S-6 indicates that water and sewer service is not planned. The County Council adopts and amends the Plan and delegates power to the Montgomery County Department of Environmental Protection (MCDEP) to administer the Plan and to approve category change requests under certain conditions, with consent of other reviewing agencies.

* **The WSSC provides nearly 170 million gallons of potable water per day (MGD) to Montgomery and Prince George's counties.** The WSSC has two water filtration plants: one on the Potomac River and one on the Patuxent River. The water quality at both plants consistently exceeds all EPA requirements. The operation of the WSSC water facilities is coordinated under regional agreements within the Washington Metropolitan Area.

* **The WSSC estimates that additional water supply may be needed by 2015.** As the demand for water approaches the level at which the Potomac and Patuxent Rivers can supply raw water, new technologies will be required to develop regional solutions for alternative sources for this limited resource. Conservation of water is and should remain a major component of managing the region's water supply. Currently, conservation measures are as unobtrusive as changes in the plumbing code to require low flow fixtures and as active as individuals modifying their water usage patterns.

* The WSSC estimates that additional water treatment capacity will be needed by 2005. Also, on-going maintenance, repair and construction will continue in various areas of the County.

* The Safe Drinking Water Act (SDWA) regulates the amount of microbiological matter and 18 metals, including lead, that may be present in drinking water. Water utilities, such as WSSC, are now required to ensure that lead levels at the tap are below certain levels. Previously, utilities only were regulated on the utility-owned portion of the water system, not for the individual, privately-owned pipes that connect a residence to the water main. Overall, the lead content in the WSSC system complies with the new standards. There are some portions of the system where lead components on private property will need to be replaced. Regulations regarding a utility's responsibility to replace private components have not been finalized.

13. SEWERAGE SYSTEM

Handling and treating human wastes is an essential component of public health protection. The WSSC sewerage system has been designed and constructed to minimize health risks due to faulty septic systems and outdated methods of dumping untreated sewage directly into a stream system.

Sewage treatment produces sludge, which historically was disposed by landfilling methods. The WSSC also provides for the beneficial use of treated sludge through composting and agricultural land application.

Like the water system, the sewerage system must be planned and constructed in conjunction with development. Much of the County's sewage is treated at the Blue Plains Wastewater Treatment Plant or WSSC-operated plants. The town of Poolesville is served by its own plant, while low-density residential and agricultural areas are served by private septic systems. The safe operation of all types of sewage disposal techniques is essential in protecting the public health and in

maintaining the quality of the County's waterways.

* The WSSC operates two wastewater treatment plants (WWTP's) in the County, with an additional facility planned. The Seneca and Damascus WWTP's can process approximately six million gallons per day (MGD). Both plants provide secondary and advanced treatment. Secondary treatment removes solid particles by sedimentation (sludge) and skimming (scum) and organic components through microbiological activity. Advanced treatment removes nutrients such as nitrogen and phosphorous and additional suspended solids, beyond secondary treatment.

A proposed advanced WWTP on Rock Run near Avenel in Potomac will have a capacity of 20 MGD. In addition, approximately 169 MGD of the 370-MGD ultimate capacity of the Blue Plains WWTP is allocated to the WSSC. It is anticipated that by 2010 or 2015, the Blue Plains service area will need an additional 20 MGD of capacity, even with the construction of the Rock Run WWTP. Based on the 1983 bi-county Sewage Treatment Agreement, the Rock Run WWTP is the next scheduled increment in capacity for the Blue Plains service area.

* The WSSC, along with agencies of Montgomery and Prince George's counties, has begun to prepare the WSSC's Strategic Sewerage Plan. The objectives of this study are to determine the long-term (40 year) wastewater treatment and transmission needs within the Washington Suburban Sanitary District, to develop alternatives to meet these needs and to identify staging strategies.

* WSSC wastewater treatment plants (WWTP's), including Damascus and Seneca, have won awards from EPA while Seneca also received a gold medal from the Association of Metropolitan Sewage Agencies. These awards acknowledge the high quality treatment provided by WSSC.