

The pages in this document were taken from the "Corsica River Watershed Characterization" published in October 2003. The entire document can be found at [http://dnrweb.dnr.state.md.us/download/bays/cr\\_char.pdf](http://dnrweb.dnr.state.md.us/download/bays/cr_char.pdf).

# Corsica River Watershed Characterization

## **Excerpt Showing an Example of Point Source Pollution Characterization**

**October 2003**

## Sources of Pollution

Since European settlement of North America there has been an explosive growth in human population, supported by more intensive agriculture and the growth of industry. The entire continent has been crisscrossed and made mutually interdependent by vast transportation systems. All of this contributes to the decline in water quality and other natural resources. Sources of water pollution, which are grouped into two broad categories point sources and nonpoint sources, and nutrient pollution loads associated with these sources are discussed below.

### 1. Point Sources

Pollution arising from discharges through pipes or other “discrete conveyances” are called point sources. Point sources may contribute pollution to surface water or to groundwater. For example, wastewater treatment discharges may contribute nutrients or microbes that consume oxygen (measured as Biochemical Oxygen Demand (BOD)) reducing oxygen available for other aquatic life. Industrial point sources may contribute various forms of pollution. Some understanding of point source discharges in a watershed can be useful in helping to identify and prioritize potential restoration measures.

The Corsica River Watershed has four permitted discharges, based on information from the Maryland Department of the Environment (MDE) permit data base. Summary information is presented in the [MDE Permits Summary Table](#) and on [Map 5 MDE Permits](#):

- The Corsica River’s upper tidal waters and the lower Mill Stream Branch may have a localized impairment associated with the Centreville Wastewater Treatment Plant (WWTP) according on MDE’s interpretation of 1997 water quality monitoring data. This interpretation arises because 1997 monitoring of these tidal waters found that dissolved oxygen concentrations fell below 5.0 mg/l under some conditions and that total nitrogen

concentrations ranged between 1.0 mg/l to 3.0 mg/l. No other facilities with MDE permits appear to be contributing to these water quality problems.

- The Town of Centreville anticipates that land application of treated sewage effluent could begin as early as 2004. This change could significantly reduce point source nutrient contributions to the river.

Characteristics of permitted discharges (volume, temperature, pollutants, etc.) are tracked by MDE through the permit system. This information is accessible to the public and can be obtained from MDE.

<b>MDE Permits -- Surface Water – Corsica River Watershed (2/2003 MDE Data)</b>			
<b>Facility Type / Name</b>		<b>MD Permit / NPDES Permit</b>	<b>Receiving Stream / Street / Description</b>
Surface Water Discharge	Centreville Wastewater Treatment Plant	97DP0116 MD0020834	Corsica River, Johnson Lane, treated sewage effluent
	Tidewater Publishing Corp.	95DP0211	Gravel Run, Tidewater Drive, wash water
	SHA Centreville Shop	97SW1315	Three Bridges Branch, Safety Drive, stormwater
Ground Water Discharge	Centreville Wastewater Irrigation Facility	00DP3323	Hope Road, This discharge of treated sewage effluent is anticipated to begin in 2004.