

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.

Corsica River Watershed Characterization

Excerpt Showing an Example of Stream Survey Information

October 2003

Water Quality Monitoring

1. Intensive Surveys 1992 and 1993

Intensive water quality surveys were conducted in 1992 and 1993 near the Centreville Wastewater Treatment Plant discharge and downstream to the Watson Road Bridge. This data was not used in the Corsica River nutrient TMDLs because the geographic coverage was too limited to characterize the entire tidal area of the Corsica River.⁵

2. 1997 Monitoring for the TMDL

Two water quality surveys were conducted in the Corsica River watershed in the summer of 1997 to support work on the TMDL at locations shown in [Map 4 Monitoring Water Quality](#). The summer represents critical conditions for the Corsica River. This is because there is less water flowing in the channel, higher concentrations of nutrients, and the water temperatures are usually warmer creating good conditions for algal growth. Data from these 1997 surveys was used to develop the nutrient TMDLs for the Corsica River.⁵

3. Long Term Monitoring in Tidal Waters

Long term monitoring of tidal waters has been conducted in the Chester River at two locations. Similar long term water quality monitoring has not been conducted in the Corsica River. Based on interpretation of 1997 Corsica River water quality data, influence of the Chester River on Corsica River water quality conditions is not clear. Status and trends information for the Chester River long term monitoring stations is available on the Internet at <http://www.dnr.maryland.gov/bay/tribstrat/index.html> .

2003 Stream Assessments Conducted By DNR

During 2003 in partnership with the Town of Centreville and Queen Anne's County, DNR conducted two types of assessment of selected streams in Corsica River watershed. The reports are available at www.dnr.maryland.gov/watersheds/surf/proj/wras.html.

A Stream Corridor Assessment focused on several subwatersheds selected by Queen Anne's County. DNR uses trained teams who walk up to about 100 miles of streams to document potential problems and restoration opportunities. The kinds of issues identified include: channel alteration, erosion sites, exposed pipes, fish barriers, inadequate buffers, livestock in the stream, near-stream construction, pipe outfalls, unusual conditions, and reference conditions which are cataloged at regular intervals as a way to define typical stream conditions.

In the Synoptic Survey and Aquatic Community Assessment, DNR staff collected water quality samples and assessed fish and benthic macroinvertebrates in selected nontidal streams. The water quality findings in the report can help identify problem areas and relative conditions among local streams based on measurements of dissolved oxygen, pH, nutrients (phosphorus and nitrogen), conductivity and flow. The nutrient yields estimated at each sampling site allow ranking the subwatersheds based on the nutrient load estimates. For some of these nontidal stream sampling sites, DNR staff has also assessed fish and benthic organism populations. These assessments provide additional perspectives to gauge local water quality and habitat conditions.