

## **Document Overview**

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This Document Overview provides a brief summary of the contents of the eleven sections included in Baltimore County's NPDES 2009 Annual Report. The major changes in this year's report include changes in the pollutant load calculations (Section 10.2), pollutant load reduction calculations, tracking progress towards meeting Total Maximum Daily Loads (TMDLs) and the Maryland Tributary Strategies. Most of these changes occur in Section 10. In addition, revised impervious surface acreage is included in this year's report (see Section 7) based on updated 2005 aerial photography.

### *Section 1: Stormwater Management Program*

Baltimore County implements a stormwater management program in accordance with the Annotated Code of Maryland, including implementation of the Maryland Stormwater Design Manual. This section of the report includes data on the number of plans reviewed and fees-in-lieu money received. There is information on the number of approved stormwater facilities and the type of facilities as well as the acreage of drainage area controlled by these facilities. Data is also provided on inspections of facilities and the number and types of maintenance activities. The pollutant load reductions that result from the stormwater management facilities are calculated, as well as the amount of impervious surface addressed from the drainage area of these facilities. This information fulfills section E.1 and E.2 of the NPDES permit.

### *Section 2: Sediment Control Program*

Baltimore County implements a sediment control program in accordance with the Annotated Code of Maryland. This section of the report includes data on the number of plans reviewed and permits issued. Data is provided on the acreage of disturbed area and is categorized by watershed. Trends in the numbers of building and grading permits are examined. A summary of the number of inspections and enforcement actions is included. This section fulfills section E.4 of the NPDES permit.

### *Section 3: County Property Management, Road Maintenance and Recycling Activities*

The activities accounted for in this section of the report are implemented by both the Department of Public Works (DPW) and the Department of Environmental Protection and Resource Management (DEPRM). Activities accounted for include; the Stormdrain Cleaning Program, the Street Sweeping Program, and hazardous waste recycling programs. This section includes a summary of the County Property Management as it relates to acquiring Industrial Stormwater General permits and preparation of Pollution Prevention Plans. Also reported in this section is data on the use of fertilizer, pesticide and deicing materials. This fulfills the NPDES permit requirement for section E.5 and E.6.

### *Section 4: Education Program*

Baltimore County implements and maintains a public education and outreach program to reduce stormwater pollutants. Information provided in this section includes DEPRM's partnerships with other State programs, County level programs, as well as all interested local watershed groups. Baltimore County continues to lead the State in the number of State Green School awards, has developed the award winning Growing Home Campaign

and implements a highly successful Tree-mendous Maryland program. DEPRM continues to expand its outreach to local school administrative staff through workshops. This program fulfills the requirements of section E.7 of the NPDES permit.

*Section 5: Illicit Connections Program*

This section of the NPDES report summarizes the detection, investigation, and remediation of illicit connections to the County's storm drain system. Data is provided on routine screenings and complaint investigations. Outfall screenings are presented by distribution priority and quantitative and qualitative problems. Details on complaint investigation results are separately listed. This information meets the requirements in section E.4 of the County's NPDES permit.

*Section 6: Geographic Information System and Databases*

This section describes the Geographic Information System (GIS) information and databases submitted with the report, as required by permit condition Part III C and Part IV A.

*Section 7: Watershed Planning and Restoration Program*

The Watershed Management Program continues to systematically assess the water quality within all of its urban watersheds. The data provided in this section satisfies, in part, section F and G requirements of the NPDES permit. A status is provided on watershed plans and the development of small watershed action plans. Documentation of capital restoration projects constructed by DEPRM is provided for each watershed. This year's report has included a nutrient reduction estimate from shoreline erosion control projects. This reduction is theoretically determined based on how much sediment is prevented from entering a waterway (see Section 7.3.2). Summary tables include the costs of each project and the projected pollutant reduction. The County's Community Reforestation Program and the restoration activities from local watershed groups provide additional pollution reduction benefits. Pollution reduction projections for these activities are included for the first time in this year's report. Also included is an accounting of the amount of impervious surfaces addressed by DEPRM's capital restoration projects. Baltimore County is required to address 10% of its impervious surfaces during this five-year permit period. Section 7 also includes updates on the status of TMDL development for the various watersheds. This information meets the requirements in section F of the County's NPDES permit.

*Section 8: Discharge Characterization and Assessment of Controls*

This section describes the Scotts Level Branch monitoring plan and provides an analysis of the chemical, biological and geomorphological data. The section also presents the data derived from Windlass Run.

The Scotts Level Branch long-term monitoring site has been paired with sites in Upper Gwynns Falls and Powder Mill Run in a paired watershed design. The intent of this paired watershed design is to determine restoration effectiveness on a subwatershed scale in the realms of chemical load reduction, improvement in the biological community, and changes in stream erosion rates. The design will also determine the relative proportion of chemical pollutant load attributed to watershed wash off and stream erosion.

The ongoing Windlass Run monitoring to determine the effectiveness of the *2000 Maryland Stormwater Design Manual* is presented in this section this year. Additionally a progression of development in Windlass Run from 1995-2007 from which orthophotographs were available has been included in this section. Previously, it had been accorded its own section. This section meets the reporting requirements for section H in the NPDES permit.

*Section 9: Watershed and Restoration Monitoring*

This section combines analysis of the chemical, biological, and geomorphological data collected exclusive of the Scotts Level Branch and Windlass Run monitoring sites. In addition, a section on Submerged Aquatic Vegetation (SAV) data collected by the County has been included. The section summarizes chemical data collected through the County baseflow and tidal water-monitoring program. It also summarizes the results from the stream restoration geomorphological monitoring program. Included are the results of the Stream Stability Assessments conducted during the reporting year. The portion of the report on the biological data includes results from the County Probabilistic Monitoring Program, stream restoration biological monitoring, and reference site monitoring. The SAV data is compared to the new Water Quality Standards for SAV coverage. Also included in this section are the Stream Corridor Assessment and the status of wild Brook Trout in the Prettyboy Reservoir watershed. The data provided in this section satisfies, in part, section F and G requirements of the NPDES permit.

*Section 10: BMP Pollutant Load Reduction*

Information provided in this section will meet the requirements of the NPDES Permit Part IV, section A.1.e. The section summarizes pollutant load reductions and the amount of impervious cover addressed due to implementation of management programs. Much of the information is already detailed in the sections on the specific management programs (e.g. Stormwater Management, Road Maintenance, and Watershed Restoration). Summary tables are provided on progress made in meeting TMDL reduction requirements and Tributary Strategy goals.

There are a number of programs for which pollutant load reductions are not calculated or are only partially calculated e.g. Education and Illicit Connections. This is due to the lack of information on the load reduction to allocate to those activities. The determination of pollutant load reduction due to education activities and from the illicit connection program will be a difficult undertaking.

*Section 11: Permit Administration, Legal Authority, and Fiscal Analysis*

This section includes the financial information regarding the County's capital, operating and maintenance budgets related to compliance with the NPDES permit. Data is provided pertaining to DEPRM's organization and budgets. It also includes the county organization to address the NPDES permit requirements and an update on any legal authority changes. This portion of the report meets the requirements of sections A, B, and I in the NPDES permit.