

Document Overview

This Document Overview provides a brief summary of the contents of the eleven sections included in Baltimore County's NPDES 2010 Annual Report. A major change is reflected in areas related to impervious surface coverage. The County has again updated the GIS layer that is used for impervious surface calculations. The new data is based on recent aerial photography flown in 2008. Another change in this year's report includes changes in the estimates of pollutant loading and reduction calculations. Updated conversions for pollutant loading estimates and updated BMP efficiencies are used in the load reduction calculations. These are then summarized to track progress towards meeting Total Maximum Daily Loads (TMDLs) and the Maryland Tributary Strategies (Section 10.2).

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 county agencies, State programs and local watershed groups.

DEPRM continues to make progress with implementation of the Baltimore Watershed Agreement through collaboration with other agencies and Baltimore City. Updates on Programs such as the award winning Growing Home Campaign and Tree-mendous Maryland are included. DEPRM has expanded its outreach to local school administrative staff and continues to lead the State in the number of State Green School awards. These programs fulfill 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. 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. This year's report has included a nutrient reduction estimate from trees planted through the Growing Home Campaign.

An accounting of the amount of impervious surfaces addressed by DEPRM's capital restoration projects is also included. Baltimore County is required to address 20% of its impervious surfaces by the end of 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 biological and geomorphological data for 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. A progression of development in Windlass Run from 1995-2007, which was first included in the 2009 report, form the basis for data analysis for 2010. Some initial development-related changes to stream physical condition and stream biota are discussed. 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 SAV data is compared to the Water Quality Standards for SAV coverage. Trends in the chemical data collected through the County baseflow and tidal water-monitoring program are summarized along with updates from the stream restoration geomorphological monitoring program. The biological monitoring section shows county-wide stream condition between 2003 and 2009, assesses biological condition of restored streams and presents the biological condition of some of the County's best streams. Also included in this section are Stream Corridor Assessments and an update of new activity related to 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 regulatory updates and changes that affect NPDES related programs. This portion of the report meets the requirements of sections A, B, and I in the NPDES permit.