



## ***Water Management Administration's Sediment, Stormwater, & Dam Safety Program***

### **Erosion and Sediment Control and Stormwater Management in Maryland**

#### **Maryland's Erosion and Sediment Control Program**

- 1961** Sediment control regulations are authorized; Attorney General determined that sediment was a pollutant based on an interpretation of the 1957 Natural Resources Article 66C.
- 1965** Montgomery County develops the first sediment control program in the country.
- 1968** Baltimore County develops a sediment control program.
- 1970** Statewide program was mandated and included several fundamental elements:
- disturbances greater than 5,000 square feet regulated
  - counties adopt grading ordinances, provide inspection and enforcement
  - Soil Conservation Districts provide sediment control plan approval for local projects
  - State provides sediment control plan review for State and federal projects and triennial review of local erosion and sediment control programs
  - criminal penalties for sediment pollution established (\$5,000 and/or 1-year imprisonment)
- 1973** Grading and building permits are tied to erosion and sediment control plan approval.
- 1980** Responsible personnel certification required for construction site operators. Refinements to penalties; each day constitutes a separate violation.
- 1984** Enforcement authority shifted to the State; locals may apply to the State for delegation of enforcement.
- 1987** Maryland Department of the Environment (MDE) created and Sediment and Stormwater Division transferred from DNR and elevated to an Administration.
- 1988** Waivers for single-family residential construction become more stringent. Administrative penalties authorized - \$1,000 per day for each violation, up to \$20,000 allowed.
- 1991** Clean Water Act regulations require National Pollutant Discharge Elimination System (NPDES) permits for construction activity.
- 1992** Sediment and Stormwater Administration eliminated and incorporated within MDE's Water Management Administration. Agricultural land management practices become subject to enforcement action for sediment pollution.
- 1994** Erosion and Sediment Control Standards and Specifications are updated to capture larger storm events and improve effectiveness.
- 2000** MDE convenes stakeholders for updating Standards and Specifications for Forest Harvest Operations (drafts circulated 2002 and 2005). MDE publishes video outreach package, "Environmentally Sound Practices in the Homebuilding Industry."
- 2002** MDE holds conferences providing technical outreach to local plan review and inspection agencies.

#### **Maryland's Stormwater Management Program**

- 1982** Stormwater Management Act passed by the Maryland General Assembly.
- 1983** Stormwater management regulations adopted (COMAR 26.17.02) requiring that new development mimic pre-development conditions as closely as possible.
- 1984** All Counties/municipalities required to have a stormwater management program and must establish ordinances; plan review and approval processes; and inspection and enforcement capabilities. MDE provides technical guidance; review of State and federal projects; and evaluation of local programs every 3 years.
- 1986** Water quality management generally applied across Maryland (first ½ inch of runoff)

- 1992** MDE helped enact enabling legislation for locals to establish a “system of charges” to finance stormwater management programs.
- 1993** Stormwater Management Committee established (business, government, and environmental leaders) and charged with improving Maryland’s stormwater management program -- provide specific guidance for water quality, manage more frequent storm events, limit number of stormwater management waivers, and create incentives for environmentally sensitive design.
- 1996** Coastal Zone Management grant awarded for the development of a new stormwater design manual. Draft manuals circulated to stakeholders in 1997, 1998, and 1999.
- 2000** MDE re-writes COMAR and incorporates by reference the 2000 Stormwater Design Manual. Criteria now required for all new development include:
- maintain groundwater recharge
  - meet specific pollutant removal goals
  - reduce channel erosion
  - prevent overbank flooding where appropriate, and
  - pass extreme flood events safely
- 2001** Local programs adopt ordinances and begin implementing the 2000 Stormwater Design Manual.
- 2004** MDE develops stormwater guidance DVD, “Maryland’s Stormwater Program: Managing for Results.”
- 2005** MDE drafts a companion document to the 2000 Stormwater Design Manual for construction and maintenance inspections; local programs evaluated and results incorporated into the Manual.
- 2007** MDE publishes supplement to model ordinance providing guidance on advanced stormwater regulations (HB1141).

### **NPDES Permitting for Stormwater Discharges**

- 1990** U.S. EPA issues regulations that require National Pollutant Discharge Elimination System (NPDES) permits for stormwater from designated Phase I dischargers:
- Industrial activity - construction, landfills, industrial waste dumps, vehicle maintenance facilities, hazardous waste storage, power plants, sewage treatment plants, land application sites, recycling facilities, and junk yards.
  - Municipal separate storm sewer systems: Large = populations > 250,000 (Baltimore City; Anne Arundel, Baltimore, Montgomery, and Prince George’s Counties; and the State Highway Administration) and Medium = populations > 100,000 (Carroll, Charles, Frederick, Harford, and Howard Counties).
- 1992** Applications due from NPDES Phase I dischargers characterizing stormwater runoff and proposing management programs to control pollutants.
- 1993** Begin issuing 1<sup>st</sup> generation NPDES stormwater permits to large municipalities: incorporate existing State programs for erosion and sediment control and stormwater management and add new elements to meet NPDES stormwater requirements; map storm drain system; monitor stormwater and inspect outfalls for illicit connections; and public outreach.
- 1994** Begin issuing NPDES stormwater permits to medium municipalities.
- 1998** Begin issuing 2<sup>nd</sup> generation NPDES stormwater permits to large and medium municipalities; require restoration for 10% of impervious surfaces.
- 1999** NPDES stormwater Phase II regulations promulgated by U.S. EPA. Dischargers include municipalities with populations < 100,000 (approximately 60 jurisdictions in Maryland) and large State and federal agencies.
- 2003** Two NPDES Phase II General Permits issued; one for local governments and the other for State and federal agencies. Permits require management programs, mapping, outfall inspection, pollution prevention, and public outreach. Begin issuing 3<sup>rd</sup> generation NPDES stormwater permits: require restoration for 20% of impervious surfaces.

