

The Chesapeake Bay Program's Urban Stormwater Workgroup Draft Decision Framework

The Chesapeake Bay Program's (CBP) Urban Stormwater Workgroup (USWG) is working to incorporate their stormwater activities and priorities for the reduction of nutrients and sediments to achieve water-quality standards into the new CBP decision framework, thereby adopting the Partnership's overall adaptive management approach. Many of the previous CBP activities to reduce nutrients and sediment, and the more recent development of the TMDL, have used adaptive-management principles.

Articulate Program Goals: The overarching goals of the USWG is to facilitate the implementation of stormwater controls to achieve the necessary pollutant reduction planning targets as defined under the 2010 Chesapeake Bay TMDL (Bay TMDL) and share successful state and local stormwater initiatives including, but not limited to, fostering BMP implementation.

Describe factors influencing goal attainment: As urban stormwater management is an incredibly complex issue and involves a diverse set of stakeholder groups, there are several factors that federal agencies, state representatives, and localities face when developing new programs and/or implementing pollutant reduction practices:

- Hierarchy of state and federal stormwater committees and workgroups
- Lack of staff and budgetary resources to implement programs and participate in committees
- Lack of project/funding prioritization
- Limited amount of scientific studies to inform management decisions

Assess current management efforts (and gaps):

By working with local governments, the Chesapeake Bay Program and the USWG can encourage the development and implementation of emerging urban stormwater practices to improve their water quantity and quality function. Program and Workgroup functions typically include:

- Supporting the WQGIT on urban and suburban stormwater issues
- Providing data and support to CBP stormwater modeling efforts
- Reviewing stormwater BMPs for incorporation in the CBP Watershed Model
- Addressing issues of interest to workgroup participants
- Promoting innovation in the field of stormwater
- On-going BMP Expert Panels
- CBP BMP Verification Framework
- Increasing education and awareness of the MS4 permitting process and community-based voluntary programs
- Building support and capacity for regulatory stormwater initiatives at the state and local level
- Targeting funding sources (e.g. CBIG & CBRAP grants) toward WIP commitments in the stormwater sector

- Increasing training and technical support for inspections, urban BMP implementation, permit writing, etc.
- Educating the end user on BMP functionality, tracking, and verification

Develop Management Strategy:

- Improve the capacity of partners to implement stormwater programs and BMPs
- Identify and target funding opportunities for stormwater management
- Build new and sustaining existing partnerships
- Provide assistance with BMP implementation and proper maintenance to ensure practices are in place and used as intended
- Develop a Bay-wide BMP reporting, tracking, and verification framework to ensure nutrient and sediment reduction targets are met and jurisdictions are receiving credit in the CBP Watershed Model for practices implemented on the ground
- Focus on education/outreach/awareness, particularly within voluntary stormwater programs in non-MS4 areas
- Increase permitting and compliance within MS4 areas
- Provide stormwater training and technical support Bay-wide

Develop Monitoring Program.

We currently have monitoring programs to:

- Report on water-quality practices being implemented
- Measure changes in nutrients and sediment in the watersheds
- Measure attainment of standards in the estuary

However, there is really no urban BMP monitoring program in place with a regional focus. Therefore, the question remains as to what exactly this Workgroup should undertake in terms of increasing our monitoring efforts. Suggested initiatives include:

- Establish regional monitoring consortiums
- Develop an internal Chesapeake Bay Program urban monitoring system to track progress

Assess performance:

The USWG will explore the possibility of working under the principles of the Partnership's adaptive management framework to assess progress toward meeting the management strategies. The following are examples of specific performance objectives that may be developed to ensure that we are on track in achieving the Workgroup's goals:

- Number MS4 permit compliance inspections completed
- Assessing implementation of urban BMPs via the Chesapeake Bay Program's Watershed Model and the partnership's verification effort
- Number of trainings to increase MS4 compliance and adoption of voluntary stormwater program efforts (e.g. model local ordinances)

Management Adaptively

- What progress had been made.
- What changes will be made and when.
- Bring in concept of what can be done in 1 year, 2-year milestones, and 2017 re-evaluation.

ADAPTIVE MANAGEMENT FOR ECOSYSTEM DECISION MAKING

[Modified from Williams and others (2007)
and Levin and others (2009)]

