

Understanding the Effectiveness of BMPs:

Synthesizing Lessons Learned from Water Quality Monitoring Studies

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Outline

- Background on the project
- Progress thus far
- Next steps
- Feedback



Background

 Synthesizing the state of knowledge from monitoring studies that look at the effectiveness of BMPs

- 2009 MRAT recommendations
- April STAR topical meeting with WQGIT
- WIPs and verification of practices
- Aid in the decision framework



Potential products

- Detailed report
 - Conclusions will include information gaps and ways to apply the lessons learned from past studies to improve future BMP implementation

- Newsletters (executive summaries)
 - For targeted audiences



Process

Literature Review

- Tidal Chesapeake Bay studies
- Nontidal Chesapeake Bay studies
- National and international large ecosystem studies



Study locations

CBW Nontidal Stories	CB Tidal Stories	Stories outside of the CB Watershed
Anne Arundel Co. stream restoration (MD)	Back River (MD)	Boston Harbor (MA)
Bald Eagle Creek (PA)	Baywide synthesis (MD & VA)	Everglades (FL)
Big Spring Run and Mill Creek (PA)	Choptank (MD)	Great Lakes (Midwest)
Brush Run Creek (PA)	Corsica (MD)	Kanahoe (HI)
Cullers Run (WV)	Gunston Cove (VA)	Lake Champlain (VT)
German Branch (Choptank, MD)	Mattawoman Creek (MD)	Neuse River Estuary (NC)
Little Conestoga Creek (PA)	Patuxent (MD)	Tampa Bay (FL)
Lower Monocacy River/Lake Linganore (MD)	Potomac (MD)	Denmark
Minebank Run (MD)	Susquehanna Flats (MD)	Spain
Muddy Creek/ Lower Dry River (VA)	Wye (MD)	
Occoquan River (VA)		
Owl Run (VA)		
Sawmill Creek (MD)		
Silgo Creek (MD)		
Spring Branch (MD)		
Spring Creek (PA)		
Stephen Foster Lake (PA)		
Trap pond (DE)		
Upper Pocomoke River (MD)		
Wetlands (MD)		
Willis River (VA)		



Interpreting the findings

- "Synthesis" workshop
- Lessons learned can be grouped into 3 main categories:
 - 1. BMP performance
 - What do we know?
 - 2. Way to improve implementation
 - How to improve BMP implementation approaches?
 - 3. Reduce Uncertainty
 - What do we need to adaptively manage in the future?



Next Steps

- TODAY: Feedback from WQGIT on report outline and list of study locations
- Synthesis team to finalize common themes in lessons learned (Feb.)
- Feedback from the WQGIT (March)
- Write report and determine communication strategy (March)
- Review process (April-May)
- Release (June-July)