



10.0 SPECIAL PROGRAMMATIC CONDITIONS

10.1 CHESAPEAKE BAY AGREEMENT (C2K)

Frederick County continues to work toward meeting the Chesapeake Bay 2000 Agreement and updates. The Chesapeake Bay Program's Local Government Advisory Committee recognized Frederick County in 2004 as a Gold Chesapeake Bay Partner Community. NPDES Program Manager Shannon Moore received a Governor's Citation on March 13, 2004 in recognition of her commitment to the Upper Potomac Tributary Team and for the County's efforts to support the Chesapeake Bay Program. In 2009, Frederick County continued the efforts that earned it recognition in the past. Additionally, the County conducted the following activities.

- Staff met at MDE on November 23, 2009 to hear about upcoming changes to the Bay TMDL and provided feedback on NPDES MS4 issues.
- The Lower Monocacy WRAS was updated in 2009 to include EPA a-i requirements for the Bennett Creek Watershed, including an estimate of the level of effort required to meet the Tributary Strategies with BMPs. The update was done prior to the release of the TMDLs in the Lower Monocacy and may require an additional update.
- Continued to attend Tributary Team meetings. Presented program information at Tributary Team meetings and sponsored several meetings.
- Conducted watershed restoration activities in support of Chesapeake Bay 2000 Agreement goals as documented in Section 7.
- Conducted outreach in support of Chesapeake Bay 2000 Agreement goals as documented in Section 6.5.
- Participated in the Alice Ferguson Foundation's Trash Free Potomac Initiative. Sponsored Big Sweep Event on April 25, 2009. Participated in Potomac Watershed Clean Up.
- Participated in the Schoolyard Habitats program. Coordinated additional restoration sites at schools in addition to those selected by Schoolyard Habitats. Added projects to tracking database and digitized projects using GIS.
- Coordinated with the Eastern Brook Trout Joint Venture through the Maryland Brook Trout Alliance and the Catoctin, Antietam and Monocacy Brookie Initiative. Staff worked with Trout Unlimited, US Fish and Wildlife Service, Potomac Conservancy, and Center for Watershed Protection to identify and restore brook trout habitat. Staff worked with Potomac Conservancy to design fish passage barrier removals and with Paul Kazyak of the Highlands Action Program to identify additional fish passage barriers.
- Developed capacity for stormwater wetland projects through the Urban Wetlands Program, Bennett Creek Watershed Pilot Project and the Bennett Creek Urban BMP Demonstration Project.
- Facilitated the Monocacy & Catoctin Watershed Alliance to protect and restore these watersheds.

10.2 TOTAL MAXIMUM DAILY LOAD (TMDL) REQUIREMENTS

Additional TMDLs for watersheds within Frederick County were added in 2009. Below is the status of TMDLs in Frederick County, which now cover 87.5% of the County's land area:

- Lower Monocacy River
 - Sediment – TMDL Approved
 - Fecal Bacteria – TMDL Approved
 - Nutrients – under development 2009-2010
 - Sediment and Phosphorus – TMDLs approved for Lake Linganore
- Upper Monocacy River
 - Sediment – draft TMDL was submitted to EPA
 - Fecal Bacteria – TMDL Approved
 - Nutrients – under development 2009-2010
- Double Pipe Creek
 - Sediment – TMDL Approved
 - Fecal Bacteria – TMDL Approved
- Catoctin Creek
 - Sediment – TMDL Approved

All TMDLs except the ones for Lake Linganore include Waste Load Allocations (WLAs). Frederick County has been working diligently to address pollutant loads in the TMDLs. The following activities work toward achieving reductions necessary to meet TMDLs. Frederick County is also working to build capacity to address new TMDLs and those in the pipeline.

Work Completed prior to 2009

- All work noted for Bay Program above also applies to TMDL efforts.
- Frederick County completed a Watershed Assessment of Lower Linganore Creek in June 2002.
- Frederick County focused on the Upper and Lower Linganore Watersheds as part of its Lower Monocacy Watershed Restoration Action Strategy. The strategy, completed in May 2004, included Stream Corridor Assessments (SCA) for several stream reaches in Upper Linganore.
- The County hired DNR to walk the remainder of Upper Linganore and all of Lower Linganore using the SCA protocol in 2004. These watersheds are complete and the reports became available in 2005.
- County staff led a process facilitated by the Environmental Finance Center to create a Task Force Report on Source Water Protection in Linganore; this report was completed in 2004 and accepted by the Board of County Commissioners.
- Frederick County Commissioners requested an Action Plan to present implementation scenarios to reduce nutrient and sediment pollution in Lake Linganore and Linganore Creek. This was adopted in 2006.

- In 2006, Frederick County completed a study and report on Assessment of Stormwater Management Retrofit and Stream Restoration Opportunities for Linganore Creek Watershed.
- Frederick County created a Capital Budget for Restoration projects in the Linganore Watershed, with design beginning in 2006.
- Frederick County worked to obtain outside funding for the Linganore TMDL area to conduct outreach and restoration projects in the area. Funding includes \$25K from the Chesapeake Bay Trust for rain gardens and riparian reforestation in Libertytown (completed 2007), \$40K from the National Fish and Wildlife Foundation for outreach (completed 2007), and \$216K from EPA's 319(h) Incremental program for urban demonstration projects (completed 2008).
- Staff installed watershed signage for Linganore to encourage stewardship and protect water quality in 2006.
- Staff from the WMS has been coordinating with Jim George of MDE's TMDL Program. Staff has participated in a working group to create guidance for local government implementation of TMDLs. Staff met with Jim George from MDE on May 16, 2006 to review recent developments in TMDL guidance for local governments and wrote a short description of TMDL efforts in Linganore for the TMDL Program. A guidance document has since been released for local governments.
- Staff developed a scenario builder with BMP effectiveness ranges that allows the County to quickly, and on demand, model pollutant load reductions and costs by drainage basin. The model provides an opportunity to maximize reductions for minimal cost. The model, which uses Simple Method-type calculations, is part of an outreach tool for the County's "House Calls" program that targets large landowners and homeowner's associations.
- Comprehensive Planning reviewed rezoning applications for proposed developments in Linganore TMDL watershed and made recommendations based on TMDL limits.
- Staff wrote articles for the "LakeTalk" Newspaper for residents of the Linganore Watershed about the TMDL and homeowner practices.
- Staff coordinated a meeting on October 2, 2006 with the Upper Potomac Tributary Team to review TMDL regulations and their intersection with the Tributary Strategies program.
- Staff coordinated a meeting between MDE and ICPRB on September 19, 2006 to discuss the development of TMDLs for nutrients in the Monocacy River. Other TMDLs for sediment, biological impairments, and bacteria are under development.
- In 2007, the Division Directors for Utilities and Solid Waste Management, Public Works, and Planning coordinated with USGS to develop a project in the Linganore Creek Watershed TMDL area that would refine sediment loads and sources. This project got underway in 2008.
- WMS was awarded \$2750 in 2007 by the MUCFC for tree plantings in Linganore and Fishing Creek in TMDL/303(d) list areas.
- The County Commissioners approved a stream buffer setback for the Linganore Watershed in 2007 to address TMDL issues from new development and approved a similar setback for the entire County in 2008.

- The Planning Division requested review of riparian buffer widths recommended by scientific literature for different purposes with local relevance (water supply, trout survival, etc.) for forest resource ordinance. This was provided and planning staff used data in proposed changes to Forest Resource Ordinance to require additional afforestation in new development, which is especially important in preventing additional impairments from new development.
- WMS staff provided TMDL information for New Market Region Plan Revision and reviewed a Floodplain District Text Amendment.
- Staff briefed Board of County Commissioners on June 19, 2008 about TMDLs.
- WMS staff met in Middletown with MDE about a sediment TMDL for Catoctin Creek and provided comments on July 26, 2007. WMS provided comments for all draft TMDLs in the Monocacy and Catoctin watersheds in 2007 and 2008.
- Staff organized a meeting with MDE on July 30, 2008 to review draft TMDLs for sediment in the Upper and Lower Monocacy River Watersheds.

Work Completed in 2009

- All work noted for Bay Program above also applies to TMDL efforts.
- Staff worked with the Storm Water Association of Maryland to review TMDL issues related to NPDES MS4 permits and give feedback to MDE, EPA, and the Bay Program.
- Staff began working with the Center for Watershed Protection on “Forests on the Fringe”, a project to develop forest cover indicators to determine forest loss through land conversion and establish goals for forest retention in the Linganore Creek Watershed. A related project also values trees for water protection for drinking water reservoir in TMDL area.
- A meeting was held between County staff and Jay Sakai, head of Water Management at MDE on July 10, 2009 to discuss changes to permits and increased implementation requirements, particularly for WLAs of TMDLs.
- Staff worked with USGS to monitor sediment and phosphorus releases in the Linganore Watershed and visited monitoring sites on July 8, 2009.
- County sponsored the Big Sweep cleanup event on April 25, 2009. The County participated in the Potomac Watershed Clean Up.
- Staff developed a Green Infrastructure concept to meet Bay Tributary goals while identifying systems with designated uses that support high-value natural resources. The Board of County Commissioners incorporated Green Infrastructure as a priority in the Strategic Plan. The Director of Sustainability also incorporated GI into the County Sustainability Plan. GI was also written into the draft comprehensive plan. A GI subcommittee formed with the internal Sustainability Task Force. GI was incorporated as a major priority of the Sustainability Commission. Staff attended Green Infrastructure training September 14-18, 2009 at the National Conservation Training Center. Staff spoke at a meeting of state and federal agencies on October 1, 2009 at the Browning Building where the agencies gave presentations about their programs’ relationship to green infrastructure. Staff also organized presentations to County staff and other interested parties on October 7, 2009 on the topic of Green

Infrastructure. Staff developed a 319 funding proposal that includes GI language to align with EPA priorities for funding.

Evaluation: Frederick County has excelled in the past year and in the permit term as a whole by meeting its many and varied commitments under Special Programmatic Conditions. Staff has actively coordinated support for initiatives designed to meet the Chesapeake Bay 2000 Agreement and has taken a leadership role to meet its own TMDL requirements and to help other local governments. Frederick County now has TMDLs that cover over 87% of the County and will be actively seeking ways to implement these TMDLs in the coming years.

