

DRAFT Phase II Cecil County Watershed Implementation Plan Analysis

Section III: Local Area Phase II WIP Contributions

1. Overview of Local Team's Process

The Board of County Commissioners (BOCC) of Cecil County recognizes the critical importance of the Chesapeake Bay to the economic well-being and quality of life of the citizens of Cecil County and, indeed, the entire region. The BOCC also recognizes that individual citizens, businesses, institutions, and local, state, and federal governments have a responsibility for caring for the Bay and its associated ecosystems. While progress in cleaning up the Bay has been made, the BOCC also recognizes that more can and should be done.

That said, however, the BOCC has grave concerns about the timeline and manner in which the United States Environmental Protection Agency (USEPA) and the State of Maryland intend to implement the Total Maximum Daily Load (TMDL) for the Chesapeake Bay.

Using the MAST tool provided by the Maryland Department of the Environment (MDE), Waste Load Allocations and Load Allocations assigned to Cecil County, and cost planning factors from several different sources, the County staff estimates that the cost to achieve the mandated goals by the State's 2020 deadline is approximately \$600M. This equates to a cost of over \$16,000 for each of the County's 35,872 households and would require the expenditure of an average of \$66M per year every year until 2020. The \$66M per year figure equates to 40% of the County's \$161M annual budget.

Stated bluntly, the State's goal of achieving 100% of the required nutrient and sediment reductions by the year 2020 is not achievable, and the goals cannot be achieved on any timeline without significant financial assistance from the state and/or federal governments.

This draft Plan Phase II Cecil County Watershed Implementation Analysis was developed using tools, information, statistics, and guidance provided by the State of Maryland. The validity, accuracy, quality of the data, and the quality of the tools used was beyond the scope of this analysis.

The BOCC wants to be actively engaged in the Phase II WIP development process and supports the State's efforts to strike a balance between environmental stewardship, fiscal responsibility, and economic viability. In order to support those goals, the Board of County Commissioners created a Watershed Implementation Plan Advisory Committee (WIP AdComm), which was made up of a cross section of Cecil County stakeholders. The WIP AdComm's mission was to advise the County Commissioners during the development of the Cecil County Phase II WIP document to ensure the document meets the goals and objectives established by Federal and State regulatory authorities, while also implementing the most cost efficient best management practices possible.

The WIP AdComm consisted of a diverse group comprised of representatives from local municipalities, watershed groups, agricultural interests, developers, and the business community as well as Cecil County Government. The following is a list of the members and their affiliations:

Table 1.	
Cecil County's Local Phase II Team Membership	
Member	Organization
Behnke, Doris	Cecil County Extension Office
Broomell, Diana	Cecil County Commissioners (Alternate)
Carpenter, Ronnie	Engineering Community
Connelly, Steve	Cecil County Farm Bureau
Flanigan, W. Scott	Department of Public Works, Director
Gould, Adam	Artesian Water
Hayes, Charles	Cecil Soil Conservation District
Hodge, Robert	Cecil County Commissioners
Minner, Jeanne	Town of Elkton Planning Office, Director
Penman, III, Robert	Artesian Water, (Alternate)
Rossetti, Rupert	Cecil County Citizenry (watershed groups)
Sennstrom, Eric	Cecil County Planning Office, Director
Sheckells, Fred	Development Community
Stewart, Gary	Economic Development Commission
Strouss, David	Engineering Community (Alternate)
Von Staden, Frederick C.	CCHD, Environmental Health, Asst. Dir.
Wallace, Wyatt	Cecil Co. Planning Commission
Whittie, Tim	Department of Public Works, Chief, DSD

The first WIP AdComm meeting occurred in February 2011, and meetings were held monthly, thereafter. The meetings were open to the general public, and, beginning in April, each meeting concluded with a public comment / discussion period. Also, the Advisory Committee has developed a local Watershed Implementation Plan advisory committee website, which houses agendas and minutes from each meeting (http://www.ccgov.org/dept_works/wipadcomm.cfm). Furthermore, a public input session regarding the draft local WIP was conducted as part of the November 1, 2011, meeting of the BOCC in order to afford members of the public the opportunity to provide input directly to the BOCC regarding the draft Cecil County Watershed Implementation Plan Phase II Analysis.

Cecil County seeks to meet its reduction targets by selecting the most cost efficient best management practices possible with the biggest challenge being the development of a funding source.

With the understanding that the County will be able to make substantive changes to our analysis during the first half of 2012, the Advisory Committee will continue to work through July 2012 to refine the strategies submitted within this analysis.

This document is not endorsed by the Cecil County Government nor any local municipalities. Any future permit requirements stated or implicit within this document should be negotiated through established permit processes. Projects that could be implemented as a result of this exercise involve significant work on private property, and the intrusion on private property rights is concerning. Cecil County reserves the right to modify or retract the document at any time for any reason at the sole discretion of Cecil County.

In the spirit of trying to support the effort, however, the County's Watershed Implementation Plan Advisory Committee is submitting this draft Phase II Watershed Implementation Plan analysis, which was prepared in general conformance with the guidelines provided by MDE. Nothing in this document, however, should be construed as a commitment on the part of the BOCC or Cecil County Government to undertake any specific projects or actions to implement the TMDL. It merely identifies possible technically viable options that could be taken if funding and sufficient time are made available.

2. County Area Phase II WIP Strategies

Urban Source Sector

Cecil County does not currently have programs in place to install stormwater retrofit best management practices; therefore, the County is unable at this time to commit to implementation milestones and will focus on 2012- 2013 milestones to develop capacity.

The County may develop watershed assessments during the FY13 milestone period, as well as utilize existing action plans developed by local watershed groups, to identify projects that could be implemented within the County. This strategy is indicative

of Cecil County's intent to maintain the needed flexibility to implement adaptive approaches to meet load reduction targets and to allow for a selection of best management practices in response to logistics, cost efficiencies and funding considerations.

Wastewater Source Sector

Cecil County will continue to operate wastewater treatment plants in accordance with the schedule and requirements of current or future NPDES permits. Cecil County may elect to pursue feasible projects which involve the connection of septic systems to advanced wastewater treatment plants, the closure of minor wastewater treatments to connect to advanced wastewater treatment plants and the expansion of treatment capacity at advanced wastewater treatment plants.^{1,2} Cecil County's intent is to maintain the needed flexibility to implement adaptive approaches to meet load reduction targets and allow for responses to logistics, cost efficiencies and funding considerations.

Septic Source Sector

Cecil County may elect to pursue cost effective strategies to connect septic systems to advanced wastewater treatment plants, report voluntary septic pumping, and upgrade existing septic systems to septic denitrification systems in an effort to meet load reduction targets in this sector.^{1,2} The current pace of implementation for septic denitrification system installations will be maintained, assuming level funding from the State. Programmatic actions for FY13 include assessing financing options and policies with municipalities for septic and sewer capacity. Cecil County's intent is to maintain the needed flexibility to implement adaptive approaches to meet load reduction targets in response to logistics, cost efficiencies and funding considerations.

¹ "Elkton West Service Area Water and Sewer Master Plan," ARRO # 6831.00; September 2007; Arro Consulting, Inc.

² "Nutrient Load Credit Analysis and Planning for the Northeast Advanced Wastewater Treatment Plant Report," Cecil Co. Project No. 55035; September 2009; GMB, LLC.

3. Local Area 2012-2013 Milestones

Cecil County Milestones by Major Sector

Milestone Period: July 1, 2011 – June 30, 2013

Urban and Suburban Stormwater

Stormwater Retrofit Implementation Milestones

- No significant implementation is anticipated in 2012 or 2013.

Stormwater Retrofit Program Enhancement Milestones

- We will continue to pursue additional revenue sources in coordination with the State. Given the anticipated high costs, we expect that a combination of Federal, State and local revenue sources will likely be needed. We will work with the State in 2012 and coming years, as needed, to refine cost estimates and identify funding options including the possible crafting of State legislation. If State and Federal funding is insufficient, we will conduct contingency planning beginning in 2013 for potential adoption of revenue sources as we deem necessary.
- In 2012, we will evaluate the local organizational structure to identify, and/or create, a division to manage a stormwater retrofit program.
- In 2013, pending results of the evaluation of the local organizational structure, we may hire, or re-structure staff to accommodate a stormwater retrofit program.
- In 2012, we will evaluate potential changes in agreements between the county and municipal governments to facilitate a stormwater retrofit program.
- In 2012, we will evaluate new ordinances, rules and guidance to create a nutrient offset program for new development and redevelopment.
- We will evaluate the need for existing ordinance revisions in 2012 and may adopt the necessary revisions in early 2013.
- In 2012, we will collaborate with local watershed associations to leverage existing watershed assessments in an effort to secure grant funding to hire consulting services to perform watershed assessments to identify restoration project opportunities.

- In 2013, if we are able to secure a grant in 2012, we will strive to hire consulting services to perform watershed assessments to identify restoration project opportunities. We will continue to investigate grant opportunities, but also consider other arrangements including developing staff expertise and identifying potential local revenue sources, loans, etc.
- We will continue to evaluate urban pollutant load reduction strategies including urban nutrient management, community reforestation, stream restoration, and stormwater retrofit strategies.

Waste Water Treatment Plants

Processed Water Implementation Milestones

- We will continue to pursue the ENR upgrade at Northeast River Advanced Wastewater Treatment Plant.

Processed Water Program Enhancement Milestones

- We will continue to evaluate options to connect communities with septic systems to advanced wastewater treatment plants.
- In 2012 we will refine cost estimates and associated connection fee increases, major utility fees and other revenue sources needed to capitalize projects that connect minor wastewater treatment plants and areas with failing septic systems to ENR wastewater treatment plants.
- In 2013 we will consider local legislation to increase fees or other sources to fund projects that connect minor wastewater treatment plants and areas with septic systems to ENR wastewater treatment plants.
- In 2012, we will evaluate the creation of a local sewer authority, governed by a Board of Directors, in order to develop an economically self-sustaining organization to independently manage and grow sewer capacity within the County.

Septic Systems

Septic System Implementation Milestones:

- Based on historical best available technology septic system installation numbers and level Bay Restoration Fund financial support, we anticipate installing approximately forty best available technology septic upgrades annually.

Septic System Program Enhancement Milestones:

- The County will continue to evaluate options to connect communities with septic systems to advanced wastewater treatment plants.
- In 2012, we will evaluate potential agreements between the county and municipal governments to facilitate the connection of septic systems to advanced wastewater treatment plants.
- In 2012 we will work in coordination with the State to consider State legislative requirements for property owners to upgrade their onsite septic disposal systems to best available technology systems with appropriate public support and waiver provisions to account for things like age of the system and other concerns that arise.
- In 2012 we will explore options for a local program that would require property owners to upgrade their onsite septic disposal system to a best available technology system.
- In 2012 we will evaluate alternative solutions that will enable us to secure equivalent reductions of the septic load at a lower cost as compared to the cost to upgrade onsite septic disposal systems to a best available technology system.
- In 2013, if the State is not in the process of adopting a similar program, we will assess the options for upgrade requirements and funding mechanisms developed in 2012.

Land Use Change

Program Enhancement Milestones:

- We will consider developing a local accounting process for changes in land use and pollutant loading. This information could be used to track conversion to and from each land use classification (agriculture, forestry and urban) and to verify and provide accurate land use data to the Chesapeake Bay Program Watershed Model.

Agriculture

Program Enhancement Milestones:

- We will support the agricultural community's efforts to implement the objectives of the Watershed Implementation Plan Phase II process and to explore opportunities for nutrient trading between sectors.

4. Area Implementation Tracking, Verification and Reporting Methods

Cecil County does not track the reduction of nitrogen, phosphorus or sediment from regulated activities within the County. A local nitrogen, phosphorus and sediment loading accounting process may be developed, as referenced in the two year milestones.

For the septic sector, the Cecil County Health Department regulates septic system upgrades and reports those upgrades in accordance with State requirements.

For the urban sector, since Cecil County does not have a stormwater retrofit program, no tracking, verification or reporting methods exist. Any stormwater management best management practices that are installed as the result of new development or redevelopment are reported to the State through completion of a Notice of Construction Completion Form. Cecil County tracks stormwater management best management practices in a GIS layer in addition to maintaining a digital database of stormwater plans and as-builts.

For the wastewater sector, tracking, verification and reporting are completed in accordance with NPDES permit requirements.

5. Relationship of Local Watershed Planning Framework to Phase II WIP

Of the twelve 8 digit watersheds in the Chesapeake Bay portion of Cecil County, two have active Watershed Associations with ongoing design and implementation projects.

- In the southern part of the county, the Sassafras River Association (SRA) completed a watershed-wide Assessment Plan in 2009, which was approved by EPA Region 3 and

is currently in a multi-faceted implementation program across all sectors. SRA's approved watershed plan makes the Sassafras Watershed eligible for certain grants, which SRA has persistently sought and been awarded to fund several innovative restoration projects.

- In the north west part of the County, the Octoraro Watershed Association completed an assessment of the Stone Run sub-watershed (in and around the town of Rising Sun) in 2010 and is currently in the design phase for a stormwater wetland restoration in a town park, with funding from the Chesapeake Bay Trust and consulting services from the Center for Watershed Protection.
- The Upper Western Shore Tributary Team is also still active, and the PA-based Elk Creeks Watershed Association has expressed an interest in becoming more active in the Cecil County portion of their watershed.

6. Identification of technical discrepancies, such as data concerns, and recommended future steps to address these concerns.

Several technical discrepancies were observed during the preparation of the draft Cecil County Watershed Implementation Plan Phase II analysis. First, GIS layers, which were distributed by the State and used to derive landuse data, had inconsistencies with locally available data. Two examples that are representative of this problem, but are not inclusive of the discrepancy as a whole are: the SHA Phase II layer is missing state maintained roads within Cecil County; and, the State Phase II layer is missing State owned properties within Cecil County. MDE should perform quality assurance reviews of all currently distributed GIS data in addition to any data that will be released in the future. Part of the quality assurance process may require coordination with local, State and Federal agencies to verify the accuracy of all data. Second, another potential discrepancy is whether all municipalities that are required to obtain coverage under the municipal separate storm sewer system general permit have obtained coverage. MDE should perform an assessment to determine if all jurisdictions that are required to obtain coverage under the general permit have actually acquired coverage. Third, within the Maryland Assessment and Scenario Tool, percentages of landuses, which currently have best management practices installed, seem to be indiscriminately applied. Actual

percentages for each specific landuse do vary. Having a constant percentage of a best management practice applied to a specific landuse may underestimate the pollutant load reduction achieved by the best management practice. MDE should perform an analysis to determine the exact landuse treated by specific best management practices. Fourth, Maryland Assessment and Scenario Tool data indicates the Cecil County has no acres in urban forest buffers on developed urban land around streams. In fact, Cecil County has enforced stringent zoning and subdivision regulations, which has preserved substantial tracks of urban forest buffers around streams. Simply including the urban forest buffer within the forest landuse category may substantially change the load reduction values. In conclusion, a multitude of technical discrepancies exist, and this fact will require substantial future analysis and effort to compile a more complete listing of technical discrepancies.

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