

ANNE ARUNDEL COUNTY GOVERNEMENT

Chesapeake Bay TMDL

2012 – 2013 Programmatic Milestones

Final Report

Submitted by:
Anne Arundel County
Department of Public Works
Annapolis, MD

January 31, 2014

INTRODUCTION

Anne Arundel County's Phase II Watershed Implementation Plan (WIP) identified programs, policies and practices and established a commitment to implementation that ensures achievement of the nitrogen, phosphorus, and sediment load reductions assigned to the County by the Maryland Department of the Environment (MDE) in compliance with the Chesapeake Bay TMDL. The County's Phase II WIP set forth a strategy for implementation that identified statutory authority, capital projects, funding mechanisms and timelines for achieving its allocated loads using Total Nitrogen as the keystone nutrient. Further, Anne Arundel County's Phase II WIP identified 2-Year Programmatic and Implementation Milestones. MDE established the first 2-Year Programmatic Milestone reporting as January 1, 2012 to December 31, 2013.

This document serves as Anne Arundel County Government's Phase II WIP 2012 – 2013 Programmatic Milestones Progress Final Report. This Final Report presents Anne Arundel County's programmatic accomplishments for the reporting period of January 1, 2012 through December 31, 2013.

MILESTONES

WASTEWATER SOURCE SECTOR

Major Municipal WWTPs (ENR Upgrades)

2012 – 2013 Programmatic Milestones

- Start-up and optimize new ENR facilities (i.e., Broadneck WRF) upon completion of construction.

STATUS: In progress. The majority of the facilities will have construction completed by early 2014 and will be operating as ENR facilities.

- Bid and initiate construction of the Cox Creek WR Phase 2 ENR upgrade.

STATUS: Complete. Bid opening was December 11, 2012. Construction was initiated in 2013 and is ongoing.

- Obtain MDE approval of a strategy for expansion and upgrade of the Mayo WRF to realize its load cap capacity and achieve ENR limits of technology.

STATUS: Complete. After further evaluation, the County will pump flow to the Annapolis WRF for treatment. MDE concurs with this approach.

SEPTIC SOURCE SECTOR

Implementation of Anne Arundel County's Onsite Sewage Disposal System (SDS) Strategic Plan

2012 – 2013 Programmatic Milestones (Large CIP Program)

- Determine long term funding methods to pay for connection of existing OSDS to public sewer and cluster treatment systems.

STATUS: In progress. Preliminary discussions have been held within the County. Further plan development may or may not draw on outside resources. It is anticipated that these discussions will be finalized in 2014.

- Develop mechanisms and policies to achieve funding.

STATUS: In progress. Formal recommendations will be developed after the funding mechanisms have been determined. Development may or may not draw on outside resources.

- Modify the County Code and administrative procedures as needed to provide authorization for the program.

STATUS: Proposed legislation and/or administrative procedures will be developed after key program elements have been finalized. It is anticipated that these discussions will be finalized in 2014.

- Develop a tracking and reporting system to follow the progress of OSDS conversion and upgrades.

STATUS: In progress. Internal meetings have been held at the County and informal discussions with MDE regarding the elements of a tracking and reporting system. The County will develop a proposed system for review and comment by MDE.

- Determine staffing requirements and pursue position authorization within the Department of Public Works, Department of Inspections and Permits, and the Office of Planning and Zoning to support the expected workload.

STATUS: In progress. As the number of contracts and estimated costs per year are more fully developed County departments will project the staffing necessary to support the program.

- Develop scope descriptions and tasks for workload to be delegated using staff augmentation contracts.

STATUS: The Department of Public Works will finalize its staffing and management plan once the program funding levels have been established. Scope descriptions for staff augmentation contracts will be developed as part of this process.

- Review and clarify legal and administrative policies to connect existing OSDS to public sewer and cluster treatment systems.

STATUS: Review of current policies will be conducted once the overall program implementation approach has been determined.

- Review and clarify permitting requirements to connect existing OSDS to public sewer and cluster treatment systems.

STATUS: Review of current policies will be conducted once the overall program implementation approach has been determined.

- Develop Countywide Public Relations Strategy.

STATUS: It is anticipated that this strategy will be developed as part of the staffing and management plan and may or may not draw on outside resources. If outside resources are utilized, a Scope Description will be developed. The target date for completing a written draft of this strategy is December 2014.

- Develop new requirements and boundaries for the proposed Cluster Treatment Areas for incorporation into the Water and Sewer Master Plan.

STATUS: In progress. Cluster areas have been identified, but specific boundaries still need further development.

- Pursue new legislation that authorizes mandatory participation by residents and businesses on septic systems for connection to the public sewer system where recommended to achieve TN pollutant reduction.

STATUS: Proposed legislation and/or administrative procedures will be developed after key program aspects have been finalized. Program development may or may not draw on outside resources. It is anticipated that these discussions will occur in 2014.

- The Department of Public Works and the Department of Health will work collaboratively to develop technical standards for new cluster systems capable of nitrogen removal.

STATUS: In progress. The Department of Public Works and the Health Department initiated regular meetings during the latter half of 2013 to discuss cluster systems and other OSDS issues that require coordination. The County may decide not to develop technical standards if use of cluster systems is limited.

2012 – 2013 Programmatic Milestones (Small CIP Program)

- Determine whether the program will be voluntary-only or a combination of mandatory and voluntary, and develop the necessary administrative procedures or legislation.

STATUS: Proposed legislation and/or administrative procedures will be developed after key program aspects have been finalized. Further plan development may draw on outside resources to facilitate. It is anticipated that these discussions will occur in 2014.

- Determine how costs will be shared by existing homeowners.

STATUS: A Small CIP program development task has been completed. Cost sharing for Large CIP Program and Small CIP Program is to be discussed concurrently. The target date for completion of a Small CIP Program Implementation Plan is December 2014.

- Consider the issue of equity between homeowners connected through the large CIP Program and those connected through the small CIP Program. In general, connections through the Small CIP Program are expected to be lower cost projects.

STATUS: See status of previous milestone.

- Explore incentive systems for individual homeowners to increase interest in voluntary participation.

STATUS: Incentive systems and public outreach will be topics for discussion in coordination meetings with the Health Department.

- Develop a system in coordination with the Department of Health for identifying and prioritizing areas to determine upcoming projects to be performed each year.

STATUS: In progress. During 2012 and 2013 information and data files were shared between the Department of Public Works and the Health Department. The Health Department data was integrated in the Small CIP Program development task. A prioritization system will be the subject of discussions at the regularly scheduled coordination meetings between the two agencies during 2014.

- Develop a public outreach program to notify neighborhoods of upcoming projects.

STATUS: Not started. A Neighborhood Public Outreach Program will be a topic for discussion in coordination meetings with the Health Department and will be incorporated into the Public Relations Strategy.

- Determine an annual funding level for the program implementation.

STATUS: In Progress. The Small CIP Program development task will assist in developing cost estimates for Small CIP Program projects. This task should be completed by the end of 2014.

- Determine staffing requirements within the Department of Public Works and the Department of Health to support the program.

STATUS: Staffing requirements will be directly related to the decisions regarding the annual program funding level.

2012 – 2013 Programmatic Milestones (Private Sector Facilitated Upgrades)

- Develop new policies and procedures to minimize construction of new systems in management areas designated as high priority for conversion to point source treatment. These new policies will be developed in accordance with Senate Bill 236 (Sustainable Growth and Agricultural Preservation Act of 2012). Areas identified for connection to public sewer or cluster treatment will likely be designated under Tier 2, which does not allow major subdivisions to be developed on septic systems. New septic systems are only allowed for minor subdivision and are viewed as a temporary solution.

STATUS: In progress. The County's Growth tiers were certified in 2013. Information on the Tiers is posted on the County's web site. Initial meetings have been conducted to address components of the Water and Sewer Master Plan. Now that the County's Growth Tiers have been developed further progress on this milestone will be made.

- Develop new policies to further reduce nutrient loading from future OSDS.

STATUS: In progress. Internal meetings to discuss additional policies to encourage further OSDS load reductions will be held in 2014.

2012 – 2013 Overarching Programmatic Milestones (OSDS Nitrogen Reducing Units)

- Continue to educate Anne Arundel county residents and businesses on proper maintenance of an on-site sewage disposal system. Continue to recommend septic tank inspections and pump-outs be conducted by a licensed liquid waste hauler once every three (3) years. Annually distribute 450 copies of educational materials in the form of DVDs, records, file folders, and brochures to Anne Arundel County residents and businesses to meet the Septic System Maintenance requirement goals.

STATUS: Ongoing

- Continue to enforce the requirements of the Anne Arundel County Property Maintenance Code. The Anne Arundel County Property Maintenance Code requires that property owners maintain their septic system in a safe, sanitary, and functional condition. Where a violation is identified, Anne Arundel County enforces the requirements of the Maintenance Code including the issuance of notices, citations, and civil fines.

STATUS: Ongoing

- As needed, develop and implement updates to the inventory of developed accounts served by an on-site sewage disposal system. This inventory is critical to the assessment of the State's Flush Fee, and to ensure accurate accounting of NRU and BAT units installed for tracking purposes.

STATUS: The Health Department continued to develop and perform quarterly updates to accurately assess the inventory of developed parcels served by an on-site sewage disposal system.

URBAN STORMWATER SOURCE SECTOR

Core Urban Stormwater Strategy – Tier I

2012 – 2013 Programmatic Milestones (Stormwater Pipe Outfall Retrofits)

- In conjunction with the Office of Planning and Zoning investigate the feasibility of developing a fee in lieu to enable restoration of unstable outfalls.

STATUS: The cost to restore unstable outfalls was incorporated into the County's Cost to Comply Analysis in the developing the County's Stormwater Remediation Fee. Funding for restoration of outfalls has been addressed through the Stormwater Remediation Fee therefore, a fee in lieu is no longer needed.

2012 – 2013 Overarching Programmatic Milestones (Tier I)

- Establish a work group to develop legislation creating a financing method for financing the WIP Phase II Implementation Plan to meet the requirements of promulgated TMDLs and the County's NPDES MS4 Permit, as well as maintenance of the County's stormwater management infrastructure.

STATUS: Complete. Following the passage of The Stormwater Management – Watershed Protection and Restoration Program Act (House Bill 987) requiring NPDES MS4 Phase I jurisdictions in Maryland to develop a Watershed Protection and Restoration Program including the adoption of a Stormwater Remediation Fee, Anne Arundel County established a multi-stakeholder Stormwater Committee to “seek agreement around elements of the State legislation requiring creation of a stormwater utility, informing the

County Council and County Executive, so that the County can make significant progress towards achieving its clean water permitting requirements.”

- Adopt and implement a Stormwater Remediation Fee as required by House Bill 987 by July 1, 2013.

STATUS: Complete. Anne Arundel County adopted legislation in June 2013 to create a Watershed Protection and Restoration Program (WPRP) including a Stormwater Remediation Fee. The WPRP became effective July 1, 2013. The legislation is codified as Article 13 Title 7 in the Anne Arundel County Code.

- Develop and execute a Memorandum of Understanding (MOU) with the State Highway Administration (SHA) for coordinated implementation of urban stormwater projects.

STATUS: Anne Arundel County Department of Public Works meets with the State Highway Administration quarterly to discuss WIP coordination issues and opportunities. After consultation with County and State attorneys it was determined that a formal MOU was not needed. Formal funding agreements will be executed when and if needed on a project by project basis.

- Identify, prioritize, and establish a timeline for joint SHA/AACo implementation projects.

STATUS: SHA and Anne Arundel County are currently identifying and mapping potential projects for joint implementation. GIS data layers have been shared and a composite map of County and SHA WIP implementation projects has been developed. Prioritization of projects will be the topic of discussion during the 2014 quarterly coordination meetings.

- Coordinate with Federal/State regulators to reduce permitting time.

STATUS: Throughout this reporting period, Anne Arundel County (the County) has engaged in discussions and field tours with EPA's Region III Regulatory Program, EPA's Chesapeake Bay Program, the Baltimore District Army Corps of Engineers (the Corps) and the Maryland Department of Environment Non-tidal and Waterways Division to address the issue of State and Federal permitting and to work toward a permitting process that facilitates the County's ability to implement projects to meet TMDL compliance deadlines. The County met with the Corp to present the watershed based approach it took in developing and budgeting WIP implementation projects into its Watershed Protection and Restoration Program (WPRP) 6-Year Capital budget. As a result of the ongoing effort to address permitting issues, the Corps established a Review

Team to work with County to develop an efficient and consistent process for retrofit and restoration permitting. The Corps and the County will present their collective efforts to the Joint Evaluation Team at their March 2014 meeting.

Core Urban Stormwater Strategy – Tier II

2012 – 2013 Programmatic Milestones (Street Sweeping)

- Examine the County's current street sweeping program to determine opportunities for expanding the current program to allow monthly sweeping of all curbed roads.

STATUS: During FY14, the County will contract for street sweeping services for which funding was appropriated via the Watershed Protection and Restoration Fund (WPRF). These services will initially augment the existing County street sweeping program. As the WPRF is phased in and increased funding is available, the program can be expanded to encompass additional curbed County roadways. Currently, the County is targeting those curbed roads with high traffic volumes or outfalls that discharge to and/or touch a tidal or non-tidal water body, with the Patapsco River Watershed slated to be a priority street sweeping area given the Baltimore Harbor Trash TMDL.

- Assess staffing resources and assignments. Develop a plan to augment staff as needed.

STATUS: In lieu of additional staff to address street sweeping, the County has opted to contract this work effort. Thus, County staff will be augmented by firms under contract to the County to provide street sweeping services.

2012 – 2013 Programmatic Milestones (Inlet Cleaning)

- Assess staffing resources and assignments. Develop plan to augment staff as needed.

STATUS: The County reviewed existing staffing levels and identified a need for 10 new positions to address culvert and closed storm drain inspections as well as closed storm drain maintenance (e.g., inlet cleaning). These new positions were requested as part of the County's FY14 budget and 8 of the 10 positions were approved for hiring in this fiscal year.

2012 – 2013 Programmatic Milestones (Tree Planting)

- Develop a short term and long term reforestation plan that identifies areas appropriate for planting.

STATUS: The Department of Inspections and Permits is finalizing an Urban Tree Canopy Project which will set forth an implementation plan for increasing forest cover in urban areas of the County. Implementation is underway and the effort will continue in the foreseeable future utilizing identified area(s) for reforestation and other prescribed conservation efforts so as to provide consequential impacts to the County's goal of maintaining and expanding existing forest coverage.

- Work with the Department of Inspections and Permits to determine the feasibility of creating a Rural Residential Reforestation Program.

STATUS: The County evaluates individual properties as opportunities arise for preservation or reforestation in rural residential areas. Although a formal Rural Residential Reforestation Program has not been developed to date, the County is in the process of negotiating with property owners for the acquisition of four (4) separate properties totaling approximately 50 acres in the Critical Area to preserve existing woodlands and provide opportunity for the implementation of larger scale reforestation efforts. At this point in the negotiations, it appears that only one of the four properties will move to purchase. This property totals 19.58 acres.

- Implement a stream buffer planting program on county land adjacent to creeks, streams and rivers.

STATUS: Progress on this milestone is tied to the milestone for developing a short term and long term reforestation plan that identifies areas appropriate for planting. The Urban Tree Canopy project focused on identifying sensitive areas and open areas adjacent to sensitive areas. The Department of Inspections and Permits has worked with the Department of Public Works to augment plantings on stream stabilization and outfall rehabilitation projects.

- Work with the Department of Inspections and Permits to develop a standard operating procedure for capturing and tracking load reductions associated with reforestation and afforestation projects.

STATUS: Preliminary discussions have taken place between WIP staff in the Department of Public Works and the Forestry staff in the Department of Inspections and Permits to begin developing a tracking system of reforestation and afforestation projects.

2012 – 2013 Programmatic Milestones (Stormwater to the Maximum Extent Practicable)

- In conjunction with other county agencies develop a methodology for identifying and prioritizing those areas where maximizing stormwater management of currently undermanaged sites is feasible and cost effective.

STATUS: The County has identified and prioritized subwatersheds most in need of restoration. Opportunities for managing impervious area and achieving pollutant load reduction have been identified within each of the high priority subwatersheds. In its FY14 Capital Budget the County created a new class of projects, the WPRP or “B” Class. Each “B” Class project consists of multiple restoration opportunities that are hydrologically connected or proximate to one another thus achieving increased cost efficiency through design and construction. Twenty “B” Class projects were funded in FY14. These projects consist of the restoration of 48 stream segments, rehabilitation of 174 outfalls for water quality improvement and the retrofit of 178 stormwater management ponds. Of these projects, 4 stream segments are under design, 7 outfalls are under design and 47 ponds are under design.

2012 – 2013 Programmatic Milestones (Watershed Stewards Academy (WSA) and Watershed Organization Implementation)

- Work in conjunction with the Watershed Stewards Academy to establish a Neighborhood Norm Certification Program. This initiative will expand and extend the WSA by deploying an army of trained, certified, and motivated master Watershed Stewards to create a paradigm shift in behavior and land use within neighborhoods to reduce pollution at its source.

STATUS: The Watershed Stewards Academy has developed the framework for a “Clean Water Communities” Program. As currently developed, the Program involves reduction of stormwater runoff by 20% over 10 properties, and the implementation of a behavior change campaign to reduce one or more pollution sources. A runoff reduction methodology and outreach material have been developed. A comprehensive homeowner guide to siting, design, installation and maintenance of 6 commonly used residential BMPs has been developed and an accompanying contractor appendix is in development. A behavior change guide will be added to this resource and will cover 6-10 most common pollutant reducing behavior changes. Piloting is underway in Hillsmere in the Duvall Creek Watershed of the south River, with 14 BMPs scheduled for installation in Spring 2014. An online web resource to support this program is in development.

- Work in conjunction with the WSA and other watershed organizations to develop protocols for inspecting and maintain projects implemented by NGOs for which load

reduction credit is being taken to ensure that they are functioning as designed for pollutant reduction.

STATUS: The Office of Planning and Zoning and the Department of Inspections & Permits with input from the Department of Public Works have been working with the Severn River Association to pilot inspection and maintenance of community owned stormwater BMPS within the Critical Area of the Severn River Watershed using trained community representatives. A field inspection has been developed and is under review.

- Engage the South River Federation in the development of a Phase II WIP for the South River Watershed to serve as a pilot for other watershed specific WIPs in Anne Arundel County.

STATUS: The South River Federation has developed the capacity to fund, design and construct restoration projects and has developed a strategic implementation plan for restoring the South River. Quarterly meetings have been established between the County and the Federation to coordinate the County's WIP efforts with the Federation's restoration efforts. The County and the Federation have developed a Memorandum of Understanding template for restoration projects through which the Federation conveys load reduction credits to the County in exchange for long term maintenance by the County.

- Work in collaboration with watershed organizations to leverage and secure grant funding for implementation projects.

STATUS: The Department of Public Works provided in-kind match in addition to letters of support, to the South River Federation, the Severn Riverkeeper, the Watershed Stewards Academy as well as several Community Associations to support applications for grants to fund restoration projects. Grants awarded to these organizations exceeded one million dollars during this reporting period.

2012 – 2013 Programmatic Milestones (Growth in Loads)

- The Department of Public Works will work in collaboration with the Office of Planning and Zoning and other County agencies to identify and map the Four Tiers of land use categories defined by the Sustainable Growth and Development Act of 2012 by December 31, 2012.

STATUS: The Office of Planning and Zoning completed development of Growth Tiers for Anne Arundel County in accordance with the Sustainable Growth and Agricultural

Preservation Act of 2012. A public hearing was held in June 2013. The Planning and Zoning Officer certified the Tiers administratively on June 17, 2013. MDE certified the County's Growth Tiers in 2013

- Provide local government perspective and assistance to the Maryland Department of Planning in the development of the State's Offset Policy.

STATUS: In 2012 the County participated in several meetings with staff from the Department of Planning and provided the County's perspective and input on the State's Offset Policy. There have been no recent meetings on this issue.

- Develop tracking and reporting mechanisms in conjunction with the Office of Planning and Zoning to account for growth or reduction in loads from new development, redevelopment, and revitalization areas.

STATUS: The Department of Public Works has established routine coordination with the County's Office of Planning and Zoning. This coordination will insure that programmed WPRP projects are taken into account during the development review process and that any opportunities or impacts from new development are understand and addressed. A process has been set up to ensure that the WPRP program receives plans for new development and has the opportunity to review and comment on their impact on WIP implementation projects, if any.

Continue investigating options for nutrient trading as a tool to offset future loads from new development.

STATUS: Investigation of options for nutrient trading to offset future loads from new development is ongoing.

ANNE ARUNDEL COUNTY GOVERNEMENT

Chesapeake Bay TMDL

2012 – 2013 Implementation Milestones

Progress Report

Submitted by:
Anne Arundel County
Department of Public Works
Annapolis, MD

Progress July 1, 2011 – June 30, 2013

INTRODUCTION

Anne Arundel County's Phase II Watershed Implementation Plan (WIP) identified programs, policies and practices and established a commitment to implementation that ensures achievement of the nitrogen, phosphorus, and sediment load reductions assigned to the County by the Maryland Department of the Environment (MDE) in compliance with the Chesapeake Bay TMDL. The County's Phase II WIP set forth a strategy for implementation that identified statutory authority, capital projects, funding mechanisms and timelines for achieving its allocated loads using Total Nitrogen as the keystone nutrient. Further, Anne Arundel County's Phase II WIP identified 2-Year Programmatic and Implementation Milestones. MDE established the first 2-Year Implementation Milestone reporting as July 1, 2011 through June 30, 2013.

This document serves as Anne Arundel County Government's Phase II WIP 2012 – 2013 Implementation Milestones Progress Report. This Progress Report presents the implementation accomplishments through June 30, 2013. Pursuant to MDE's guidelines dated March 19, 2013, Anne Arundel County will also be reporting implementation progress via existing channels for credit in annual progress evaluations using the Bay Watershed Model.

MILESTONES

WASTEWATER SOURCE SECTOR

Major Municipal WWTPs (ENR Upgrades)

2012 – 2013 Implementation Milestones

ENR Project Implementation

FACILITY	SCHEDULED COMPLETION DATE	STATUS
Annapolis WRF	June 2015	On Schedule
Broadneck WRF	December 2013	Project is 85% complete
Broadwater WRF	June 2015	On Schedule
Cox Creek WRF – Phase I	April 2013	Complete
Cox Creek WRF – Phase II	March 2017	Construction Contract Initiated
Maryland City WRF	August 2015	On Schedule
Mayo WRF	TBD	TBD
Patuxent WRF	September 2015	On Schedule

SEPTIC SOURCE SECTOR

Implementation of Anne Arundel County's Onsite Sewage Disposal System (SDS) Strategic Plan

2012 – 2013 Implementation Milestones (Large CIP Program)

- Evaluate the potential for increased staffing in project management, public relation, and other areas either through direct hiring or staff augmentation contracts.

STATUS: In progress.

- Initiate designs for capital projects within the Priority Management Areas.

STATUS: Conceptual designs have been completed. Final designs are likely to be delayed until the program funding and system for prioritizing projects has been finalized.

- Initiate a design for a cluster treatment system and collection system by 2013.

STATUS: A conceptual cluster system evaluation is underway and nearing completion. Initiation of a cluster system design is proposed for late 2013 or early 2014.

- Refine sewer extension and cluster treatment system implementation plans and cost estimates based upon site specific engineering studies.

STATUS: Complete.

- Revise the Water and Sewer Master Plan to incorporate areas outside of the Sewer Service Areas that are intended to be connected to public sewer as part of the Phase II WIP implementation.

STATUS: In progress. Some modifications were made in the County's latest Master Plan to address areas within service areas. Additional amendments may be introduced as the program moves forward.

- Submit to MDE a strategic plan defining the areas and projects to be included in the Large CIP Program.

STATUS: It is anticipated that an overall strategic plan could be submitted to MDE before the end of 2013.

- Submit budget requests to support design and construction contracts within the Priority Management Areas.

STATUS: It is anticipated that budget requests for projects will be included in the FY 15 budget. Preparation of these packages will begin in October/November 2013.

- Determine existing downstream infrastructure capacity for conveyance of wastewater resulting from the sewer system expansion designed to retire septic systems.

STATUS: Complete.

- Prepare an overall schedule for the design and construction of the sewer system expansion to facilitate a systematic and logical progression for retirement of septic systems.

STATUS: In Progress. A detailed list of contracts has been developed along with an analysis of the downstream impacts. An additional factor in the overall schedule will be the prioritization system under development. Also to be determined is the final estimated time for non-construction activities such as public participation, permitting, and procurement.

2012 – 2013 Implementation Milestones (Small CIP Program)

- Pursue the legislation and administrative procedures needed to authorize the program.

STATUS: Initial interdepartmental meetings have been held, but new, formal policies and procedures have not been developed.

- Create a prioritization list for identifying projects.

STATUS: In Progress. An initial prioritization system is under development but has not been finalized. The prioritization system should be adaptable to both the Large and Small CIP Programs.

- Create and fund projects for inclusion in the FY 14 annual Budget.

STATUS: Formal budget requests were not incorporated into the FY 14 Budget. It is anticipated that budget requests for projects will be included in the FY 15 Budget. Preparation of these packages will begin in October/November 2013.

2012 – 2013 Implementation Milestones (Private Sector Facilitated Upgrades)

- Amend the Master Plan for Water and Sewer to identify the Priority Management Areas.

STATUS: The County's Water and Sewer Master Plan was updated in May 2013. At that time the Priority Management Areas were still being refined. Once refined the Priority Management Areas will be considered for inclusion in the next Master Plan update. Some of the more refined areas within the Priority Management Areas were added to the Sewer Service Areas were added to the May 2013 update. Also, the Sewer Timing categories were revised to facilitate future connection of OSDS in some of the more refined Priority Management Areas.

- Perform outreach to the development community explaining potential program changes.

STATUS: Outreach to both the development community and public at large will occur after development of detailed strategic plan incorporating the engineer, construction, financial, legal, and public relations aspects. This is anticipated to occur in 2014. It is anticipated that a working group or committee of stakeholders including the development community will be established to provide input and help refine this plan.

2012 – 2013 Milestones (OSDS Nitrogen Reducing Units)

Anne Arundel County's Phase II WIP (July 2, 2012) outlined four (4) strategies for Nitrogen Reducing Upgrades. The strategies have been consolidated due to recent legislation and to simplify the tracking of upgrades.

- Implement the requirements of C.O.M.A.R. 26.04.02

Code of Maryland Regulations C.O.M.A.R. 26.04.02 established new requirements for on-site sewage disposal systems within the Chesapeake Bay Watershed. Effective January 1, 2013, a Best Available Technology (BAT) nitrogen-reducing unit (NRU) is required in place of a septic tank where a building addition, upgrade or new on-site sewage disposal system

installation is made. The new requirements apply to permit applications for septic tanks, drain fields, drywells, sand mound systems, pressure dosed beds and any other type of on-site sewage disposal system on a property in the. Any property that falls within the Chesapeake Bay Watershed must comply with the new requirements. Repairs or replacement of septic systems outside the Critical Area are not required to comply with the new regulation.

STATUS: Installed 427 Nitrogen reducing units.

- Implement the Bay Restoration (Septic) Fund Program

Anne Arundel County will continue to administer a Bay Restoration (Septic) Fund program. The program is supported by a State grant from the Maryland Water Quality Financing Administration of the Maryland Department of the Environment (MDE) and is subject to the Maryland Board of Public Works approval. Anne Arundel County is required to implement the Bay Restoration (Septic) Fund program consistent with the program implementation guidance issued by MDE. The Bay Restoration (Septic) Fund provides up to 100% funding to property owners to cover part or all of the cost for the nitrogen-reducing unit. Applications are prioritized based on the guidance given from MDE, with repair of failing systems in the Critical Area given the highest priority for funding. A geographic information system (GIS) is used to determine the location of the property in proximity to the Chesapeake Bay Critical Area. The County utilizes only third party verified BAT approved units for grant eligibility. BAT units are approved based on their capability of reducing total nitrogen from an on-site sewage disposal system by 50%. MDE evaluates and establishes a list of nitrogen-reducing units approved as Best Available Technology (BAT) for nitrogen removal. Grant awards include the purchase and installation cost of a BAT unit and a 5 year service contract. Qualified expenses are made by Anne Arundel County as a reimbursable cost from MDE based on the grant award letter.

STATUS: 329 Septic systems were funded.

URBAN STORMWATER SOURCE SECTOR

Core Urban Stormwater Strategy – Tier I

2012 – 2013 Implementation Milestones (Stream Restoration)

- Connect two (2) miles of incised perennial streams to their floodplains using appropriate restoration techniques. Projects programmed into the county's CIP for 2012-2013 are conventional steam restoration projects. Those projects on ephemeral and first order reaches do not rely on the use of constructed in-stream riffles.

STATUS: The County has completed ten projects so far and connected approximately 14,000 linear feet or 2.6 miles of incised streams to their floodplains. An additional twelve projects are in the design phase accounting for an additional 17,110 linear feet or approximately 3.2 miles of streams reconnected to their floodplains.

Constructed - Crofton Tributary Phase 1 & Phase 2 – 3,244 ft.

Fair Oaks Phase 1 & Phase 2 – 675 ft.

Four Seasons – 2,016 ft.

North Branch Cypress – 4,000 ft.

Old Herald Harbor Road Culvert Repair 500 ft.

Patuxent River Road Culvert Repair – 1,000 ft.

Riverdale – 150 ft.

Rupperts Ravine Phase 2 – 800ft.

Science Drive Instream Riffle – 650 ft.

Whitehall Creek Stream Rehabilitation – 950 ft.

Under Design – Cowhide Branch – 4,500 ft.

Dividing Creek Stream Restoration – 830 ft.

Duvall Creek Water Quality Retrofit – 780 ft.

Granite Baptist Church North and South Fork Rest. – 1,585 ft.

Kingsberry Drive Stream Restoration – 1,100 ft.

Mill Creek at College Parkway – 2,000 ft.

Old Mill Instream Weir – 365 ft.

Old Mill Stream Restoration – 1,100 ft.

Shipley's Choice Dam Rehab. – 3,100 ft.

Sloop, Eli, & Long Cove Retrofits, Site 1 – 750 ft.

Warehouse Creek Headwaters – 1,000 ft.

- Construct seepage wetland systems to restore degraded and severely degraded perennial streams and effectively manage runoff from 456 acres.

STATUS: Three (3) projects are complete effectively managing 555 acres of runoff. Currently no additional projects are under design.

Constructed – Beacrane Road Bog Rehabilitation – 445.4 acres

North Carolina Wetland Restoration Phase 2 – 7.3 acres

Windsor Ridge Stream Stabilization – 102.3 acres

Under Design – No projects under design

2012 – 2013 Implementation Milestones (Stormwater Pipe Outfall Retrofits)

- Initiate retrofit design and construction for 17 major outfalls.

STATUS: Four (4) major outfall restoration projects have been completed to date effectively managing 38.4 acres of runoff. Fourteen additional projects are under design with a proposed effective management of a 712.1 additional acres.

Constructed - Buena Vista Phase 1 – 17.5 acres

Millersville Elementary SPSC – 8.3 acres

Severn Drive Stormdrain and Outfall Improvement 2.5 acres

Severnview Drive Outfall Restoration – 10.1 acres

Under Design – Barrensdale Outfall Restoration - 22.4 acres

Bay Green Drive Culvert Repair – 311.7 acres

Breitwert Ave Storm Drain Improvements – 28.5 acres

Buena Vista Outfall Restoration Phase II – 1.3 acres

Buttonwood Trail Outfall Restoration – 7.2 acres

Dividing Creek Outfall Restoration – 28.9 acres

Forest Drive Outfall Restoration – 41.4 acres

Haskell Drive – 18.0 acres

Knollwood Road Outfall – 9.0 acres

Olde Severna Park Outfall – 49.7 acres

Old Bay Ridge Abandoned RR Embankment – 125.4 acres

Pinewood Road Stormdrain – 26.7 acres

ShIPLEY Road SPSC – 18.1 acres

Southdown Shore Road Outfall Stabilization – 23.8 acres

2012 – 2013 Implementation Milestones (Pre 2002 Stormwater Management Pond Retrofits)

- Initiate design and construction of retrofits on approximately eleven (11) stormwater management ponds.

STATUS: The County has recently completed the retrofit of (6) stormwater management ponds treating approximately 197 acres for water quality management. An additional 9 ponds are in the design phase with a proposed treatment of an additional 247 acres.

Constructed – Dunkeld Manor SWM Retrofit – 10.9 acres

Foxmoor Stormwater Management Facility – 45.1 acres

Gray's Luck SWMP Retrofit – 41.9 acres
Leelyn Drive SWM Retrofit – 49.3 acres
Peach Orchard SWM Retrofit – 34.6 acres
Wethersfield SWM Pond – 15.2 acres

Under Design – 209th Street Pond Retrofit – 6.8 acres
Concorde Circle Dry Pond Retrofit – 60.3 acres
Hospital Drive SWM Retrofit Ponds 2 & 3 - 45.2 acres
Marabrook SWM Retrofit – 14.0 acres
Oakleaf Villa SWM Retrofit – 5.9 acres
Old County Road SWM/BMP – 64.7 acres
Valentine Creek SWM Retrofit – 35.0 acres
Windswept SWM Pond – 15.5 acres

Core Urban Stormwater Strategy – Tier II

2012 – 2013 Implementation Milestones (Street Sweeping)

- Implement monthly street sweep of up to 266 miles of curbed County roads as determined by the examination of the County's current street sweeping program.

STATUS: During FY14, the County will contract for street sweeping services for which funding was appropriated via the Watershed Protection and Restoration Fund (WPRF). These services will initially augment the existing County street sweeping program. As the WPRF is phased in and increased funding is available, the program can be expanded to encompass additional curbed County roadways. Currently, the County is targeting those curbed roads with outfalls that discharge to and/or touch a tidal or non-tidal water body, with the Patapsco River Watershed slated to be a priority street sweeping area given the Baltimore Harbor Trash TMDL.

- Assess staffing resources and assignments. Develop a plan to augment staff as needed.

STATUS: In lieu of additional staff to address street sweeping, the County has opted to contract this work effort. Thus, County staff will be augmented by firms under contract to the County to provide street sweeping services.

2012 – 2013 Implementation Milestones (Inlet Cleaning)

- Propose the cleaning of up to 17,200 inlets yearly.
- Assess staffing resources and assignments. Develop plan to augment staff as needed.

- *STATUS: The County reviewed existing staffing levels and identified a need for 10 new positions to address culvert and closed storm drain inspections as well as closed storm drain maintenance (e.g., inlet cleaning). These new positions were requested as part of the County's FY14 budget and 8 of the 10 positions were approved for hiring in this fiscal year.*

2012 – 2013 Implementation Milestones (Tree Planting)

- Implement reforestation on sixty (60) acres.

STATUS: 55 acres planted. 18 acres of forested land were purchased and permanently protected. The County is currently negotiating with two property owners for the acquisition of approximately 45 acres in the Critical Area which will be reforested once acquired.

2012 – 2013 Implementation Milestones (Stormwater to the Maximum Extent Practicable)

- Provide stormwater treatment to the maximum extent practical on seventy-six (76) acres of publically owned land and facilities.

STATUS: The County has recently completed the installation of 3 bioretention projects treating 75 acres. An additional three projects are in the design phase and will provide an additional 32 acres of treatment.

*Constructed – Cypress Creek Park and Ride Bioretention – 6.5 acres
Cypress Creek Recreation Bioretention – 0.8 acres
Selby SD Bioswales – 68.0 acres*

*Under Design - Brooklyn Park LID & Rain Garden – 11.8 acres
Century Towne Road ESD – 17.1 acres
Old Mill Community Assn Bioretention Facility – 3.1 acres*

2012 – 2013 Implementation Milestones (Watershed Stewards Academy (WSA) and Watershed Organization Implementation)

- The Anne Arundel County Watershed Stewards Academy will implement/install one hundred (100) water quality projects.

STATUS:

- The watershed organizations operating in Anne Arundel County will implement/install four (4) water quality projects.

STATUS: Constructed - Camp Letts Stream Restoration Complete – 9.1 acres

Cabin Branch Stream Restoration – 88.7 acres

Davidsonville Wildlife Sanctuary – 84.7 acres

Homestead Gardens Wetland Creation – 7.3 acres

Saefern Outfall Phase 2 – 3.7 acres

2012 – 2013 Implementation Milestones (Growth in Loads)

No milestones identified in Anne Arundel County's Phase II WIP (July 2, 2012)