

I. Planning Phase: 2012-2013	
MILESTONES	FINAL STATUS REPORT – December 31, 2013
<ul style="list-style-type: none"> Develop a work plan to achieve the strategy by June 30, 2013 	A work plan to achieve the strategy by June 30, 2013 was developed in December 2011.
<ul style="list-style-type: none"> Continue mapping work related to impervious surface areas and existing BMP's (Estimated completion date: Ongoing through September 28, 2013) 	Mapping work related to impervious surface areas is complete. Mapping of existing BMP's began July 2012 and is ongoing.
<ul style="list-style-type: none"> Utilize technical experts to assist the county in development of preferred BMP lists (Estimated completion date: December 31, 2012) 	Technical experts were contracted in May 2012 through March 2013 to assist in development of preferred BMP lists. This is complete.
<ul style="list-style-type: none"> Include and evaluate MS4 NPDES permit requirements and costs (Estimated completion date: December 31, 2012) 	MS4 NPDES permit requirements and costs were evaluated as part of the County's Phase II WIP. This is complete.
<ul style="list-style-type: none"> Continue modifying and evaluating alternative scenarios and associated efficiency ratings and costs (Estimated completion date: March 30, 2013) 	Modification and evaluation of three alternate scenarios and associated efficiency ratings and costs continued through March 30, 2013. The initial evaluation is complete.
<ul style="list-style-type: none"> Develop tracking, verification and reporting protocols (Estimated completion date: March 30, 2013) 	Tracking, verification and reporting protocols have been provided by MDE at the Southern MD WIP Workshop on May 7, 2013. This is complete.
<ul style="list-style-type: none"> Establish final cost estimates and funding sources; (Estimated completion date: March 30, 2013) 	Final cost estimates and potential funding sources were completed by March 30, 2013.
<ul style="list-style-type: none"> Present draft 2017 and 2025 local WIP II County findings to the public and elected officials (Estimated completion date: March 30, 2013) 	The draft Charles County Phase II WIP Strategy was presented to the WIP II Local Team on February 28, 2013, and the elected officials on April 30, 2013. Complete.
<ul style="list-style-type: none"> Develop a commitment to advance and secure funding to meet the goals (Estimated completion date: June 30, 2013) 	The Charles County Fiscal Year 2014 budget was adopted with stormwater retrofit funding and sewer connection study funding to meet the initial goals. Complete.
<ul style="list-style-type: none"> Final Draft 2017 and 2025 local WIP II County plan with projects, timing, costs and funding sources (Estimated completion date: June 30, 2013) 	The Charles County Phase II WIP Strategy was completed by June 30, 2013. The strategy can be downloaded here: http://www.charlescountymd.gov/sites/default/files/pgm/planning/wipphase2strategy2-28-13.pdf

II. Interim Strategies for Load Reductions by Sector: 2012-2013	
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<ul style="list-style-type: none"> <u>Upgrade to Municipal Wastewater Treatment Plants:</u> This includes planning, design and scheduling for commencement of construction for future village areas to remove nitrogen and phosphorus from existing septic systems by utilizing unified sewage treatment and farmland spray treatment. Specific areas and time frames for improvements will be estimated along with associated costs as a part of the 2013 planning process as noted above. In addition, reservation of additional future capacity at the Mattawoman Treatment Plant will be analyzed in conjunction with other potential project planning alternatives for future potential load reduction strategies. 	<p>Several projects were approved in the FY14 Capital Improvement Program budget related to connecting existing failing septics and improving existing wastewater treatment plants. These include:</p> <ul style="list-style-type: none"> Cobb Island/Swan Point Interconnection to address failing septics in the area: FY14-15 (\$1.916 M) Hughesville Package Treatment Plant: FY14-15 (\$1.788 M) Port Tobacco Sewer Study: FY14 (\$235 K) Cliffton WWTP Improvements: FY17-18 (\$1.72 M) Cobb Island Sewer Study to connect failing septics: FY15 (\$164 K)
<ul style="list-style-type: none"> <u>Septic Systems:</u> Coordination with the Charles County Health Department to help cost share septic replacements or new septic systems within the Chesapeake Bay Critical Area or otherwise near streams. The Health Department receives funding from the Bay Restoration Fund program which funds 75% of the costs for retrofit or replacements of septic systems within the Chesapeake Bay Critical Area and which utilize Best Available Technology to reduce pollutants. The remaining 25% is the landowner's responsibility. <p>This program has not been fully utilized because it still costs homeowners thousands of dollars to upgrade or replace their septic systems to better protect water quality. The strategy is to help offset costs for up to 50 units per year. The Health Department has received verification from MDE via a letter of June 9, 2011 that they will receive \$200,000 for FY12 with additional potential funding if that money is spent. The County has proposed in FY13 CIP \$100,000 per year funding to be used to cover the remaining 25% of costs to the landowners. This is currently proposed for this program but will be contingent upon approval of County Capital Improvements Program. A public outreach program for available funding for retrofit and new system improvements will be developed. An additional approximately 10 septic system hookups to wastewater treatment plants per year is estimated to continue during this time.</p>	<p>In FY13 & F14 \$100,000 was allocated from the Environmental Service Fund to supplement the Bay Restoration Fund grants to homeowners. However in FY14 the State grant requirements were revised to allow 100% grant funding for the majority of all grant applicants in Charles County.</p> <p>In FY13, Charles County Department of Health received \$485,000 Bay Restoration Fund Grant.</p> <p>In FY14, Charles County Department of Health received additional grant funding.</p>

<ul style="list-style-type: none"> • <u>Stormwater Systems</u>: Work on stormwater management will continue by developing a specific program related to stormwater retrofits and other projects and programs. The Charles County National Pollution Discharge Elimination System (NPDES) permit, also known as Municipal Separate Stormwater Sewer Systems Permit (MS4) 5 year permit is under review at this time. The permit conditions are being negotiated and a final permit should be issued by June 1, 2012. The strategy is to continue projects in order to comply with the terms and conditions of the permit, once issued. An analysis of the requirements will be performed and evaluated and cost impacts analyzed over time. Stormwater retrofit projects will be included in yearly Capital Improvement Programs (CIP's) and non-regulatory programs will continue to be developed to improve stormwater runoff and water quality. <p>As part of the future planning efforts, the County will examine large scale projects as well as small scale projects such as bioretention, buffer tree plantings, outfall repairs, infiltration improvement, street sweeping and other projects.</p> <p>Current Capital Improvement Program projects linked to this Watershed Implementation Plan include the following urban stormwater retrofit projects: FY12: Pinefield, Acton-Hamilton, Bryans Road, Bannister, Fox Run, Lancaster, Northwood, Ryan Woods, and White Plains FY13 Proposed: Westlake, St. Charles, and Potomac Heights</p>	<p>In FY13, the County adopted the Watershed Restoration and Protection Fund to implement stormwater and wetland restoration and protection projects, replacing the use of the Environmental Service Fund.</p> <p>The new MS4 5-year permit has not yet been issued, however the County has started evaluating level of stormwater management provided for impervious surfaces.</p> <p>Stormwater retrofit projects continue to be included in the yearly Capital Improvement Program. Projects that were completed during the 2012-2013 period include:</p> <ul style="list-style-type: none"> • Bryans Road, which now provides stormwater management for 10.22 acres of impervious surface; and • Pinefield, which now provides stormwater management for 22.3 acres of impervious surface <p>Stormwater retrofit projects in the permitting and construction phases include:</p> <ul style="list-style-type: none"> • Acton-Hamilton, Holly Tree lane, Fox Run, Ryon Woods, White Plains, Stavors Roads Improvements and Tanglewood Drive: FY14 (\$5.1 M) <p>Additional stormwater improvement project funded by the Capital Improvement Program includes:</p> <ul style="list-style-type: none"> • Waldorf Urban Redevelopment Corridor: Old Washington Road Reconstruction: FY14-FY18 (\$5.2 M)
<ul style="list-style-type: none"> • <u>Comprehensive Planning</u>: The County Comprehensive Plan is currently undergoing review and a complete update. This new plan will include a revised Water Resource Element and new Goals, Objectives and Policies related to water quality, water resource protection and stormwater projects and programs. The plan will recognize the Watershed Implementation Plans, and provide the policy framework for implementation of this work. Land use scenarios are being evaluated with regards to impact on nutrient loading into waterways. 	<p>The final draft Water Resources Element, which is Chapter 4 of the proposed County Comprehensive Plan, was completed in FY13 and can be downloaded here: http://www.charlescountyplan.org/document-library</p>

III. Programs and Initiatives Not Yet Quantified: 2012-2013	
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<p>The planning phase as outlined above will enable Charles County to determine the most efficient BMP's based on project scale, applicability and costs. Once this work is completed, alternative funding strategies will be examined and proposed for policy consideration and implementation by the County Commissioners. This will be presented to the County Commissioners within the planning time frame before June, 2013. Continued mapping of BMP's is needed to evaluate proposed and preferred projects. A Request for Proposals (RFP) is currently under development to begin this work in early 2012. In addition, a complete list of projects that have been completed which were not included in the most recent Bay Model of BMP's will be provided by the County to MDE, DNR and EPA for future Bay Model runs. These lists will include County BMP's as well as those from the towns of La Plata, Indian Head and the Naval Surface Warfare Center.</p>	<p>The draft Charles County Phase II WIP Strategy was presented to the WIP II Local Team on February 28, 2013, and the elected officials on April 30, 2013. This Strategy evaluated 3 scenarios for the stormwater and septic sectors and recommended the most cost effective scenario.</p> <p>The Charles County Phase II WIP Strategy was completed by June 30, 2013. The strategy can be downloaded here: http://www.charlescountymd.gov/sites/default/files/pgm/planning/wipphase2strategy2-28-13.pdf</p> <p>Updated mapping of BMP's started in July 2012 and continues. New BMPs are added as this work progresses, and will be added to the County's Urban BMP database. Updates of this database are reported to MDE annually. Additional information will also be provided regarding non-structural stormwater BMPs, and retrofit stormwater BMPs.</p>

IV. Tracking, Verification and Reporting: 2012 – 2013	
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<p>Tracking, verification and reporting progress will be included as a part of the planning phase development. Tracking of CIP retrofit projects is currently ongoing and will continue into the future as we verify and close out projects and develop new ones. A reporting system will be developed as part of the planning phase and broken into the following sectors: urban-stormwater: regulated and non-regulated activities, septic and wastewater treatment plants. In addition, previous BMP projects and management activities will be documented and verified as a part of this plan development process.</p>	<p>Tracking, verification and reporting for regulated stormwater BMPs, septic and wastewater BMP projects continues to be improved. The stormwater BMP reporting is being updated to follow MDE's proposed MS4 reporting protocol, <i>draft MDE Geodatabase Design and Guide (April 2013)</i>.</p> <p>The County proposes to use the internet based system being developed by the University of Maryland Sea Grant Extension Program for citizen reporting of non-regulated stormwater activities, referred to as the SMART tool.</p> <p>Upgrades to BAT for on-site septic are being tracked by the Charles County Department of Health. Those done pre-BRF grant are not tracked.</p>

V. Discrepancies between State and Local Government: 2012-2013

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<p>The following discrepancies based on information provided from the State have been identified and will be reported to Maryland Department of Environment and Environmental Protection Agency to include in future Bay Model runs to establish a more accurate baseline model for Charles County:</p> <ul style="list-style-type: none"> • BMP's and other work performed since 2008 from the County, the Towns of La Plata and Indian Head and the Indian Head Naval Surface Warfare Center which have not been accounted for in the model and baseline TMDL allocations. • An accurate number of total septic systems in Charles County. The County has more accurate data than provided by the State and will make this available for future Bay Model runs. • Written policy guidance on Forest Sector loads from MDE is needed. An explanation of harvested loads and the differences between 2009, 2017 and 2020 target loads needs to be clarified. • Define the baseline dates for each of the various sectors to be used to evaluate any new BMP's. • Policy guidance on counting projects within various jurisdictions and application to load allocations for the entire county, versus individual jurisdiction load allocations. 	<ul style="list-style-type: none"> • Improved accounting of stormwater BMPs in the County is occurring as the GIS mapping project progresses. These are reported to MDE on an annual basis. • EPA's consultant prepared a report for the Patuxent River Commission titled, <i>Patuxent River Basin County Septics & Impervious Cover Examination</i>, (June 12, 2012), which compared MAST data and County data. • The <i>Charles County WIP II Strategy</i> (February 2013) determined the number of septic systems and their location (Table 3-32): Critical Area (1,176), within 1,000' of perennial stream (7,588), not within Critical Area or 1,000' of a perennial stream (8,239). • The <i>Charles County WIP II Strategy</i> (February 2013), Section 3.2.2.g identifies 45 shoreline erosion control project implemented between 2004 and 2012, and proposes an average of 1,962 linear feet will be completed each year between 2013 and 2025. • <i>Crediting Conservation: Accounting for the Water Quality Value of Conserved Lands Under the Chesapeake Bay TMDL</i>, by the Chesapeake Bay Commission (June 2013), is a potential future milestone, which could assist in addressing the need to maintain the forested areas in the County.