

**Anne Arundel County 2016 – 2017 Programmatic Two-Year Milestones  
INTERIM Progress Report**

**Reporting Period  
January 1, 2016 – December 31, 2016**

<b>Target Date</b>	<b>Milestone</b>	<b>Deliverable</b>	<b>Lead Agency</b>	<b>Comments</b>
<b>Urban Stormwater</b>				
On-going	Implement the County’s Watershed Protection and Restoration Program (WPRP)	Fully staffed and implemented program	DPW	Previous 2014-2015 milestone. This is an active ongoing program within the County’s Dept. of Public Works.
12/2016	Explore opportunity to appropriate capital funding of restoration projects on a watershed basis to provide flexibility in implementation.	Watershed based capital budget	DPW Budget Admin	New 2016-2017 milestone. Completed. County legislation (Bill 64-16) passed in October 2016 to allow greater program budget flexibility.
12/2016	Explore creating a “performance based” project in the FY17 budget to enhance private sector engagement in the County’s clean water efforts	New B-Class project in capital budget	DPW	New 2016-2017 milestone. Completed. “Full Delivery” RFP solicitation put out in August 2016. Five Proposals were received in November 2016 and are currently being evaluated. Technical review of the proposals took place in January 2017, and award should be made by April 2017.

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On-going	Broaden Public Awareness and understanding of the Stormwater Remediation Fee and WPRP	Public Presentations. Outreach and education documents. Enhanced program web site.	DPW	Previous 2014-2015 milestone. In 2016 WPRP continued to expand its web-based informational program and social media campaign using Facebook and Twitter to provide stakeholders with an overview of the WPRP fee, restoration projects updates, grant opportunities, maps of project locations, and schedules, watershed assessments and educational resources regarding stormwater pollution. WPRP staff also conducted forty-two (42) formal presentations to school-aged children, community and watershed organizations throughout Anne Arundel County. WPRP continued to promote the WPRP program and highlight accomplishments.
On-going	Investigate and establish public/private partnerships to leverage funding and implement WIP restoration projects	Established partnerships that facilitate and implement restoration projects	DPW	Previous 2014-2015 milestone. Ongoing. Public/Private partnerships are now engaged through both the non-profit WPRP grant program as well as the "Full Delivery" RFP. Additionally, WPRP staff work closely with OPZ and I&P staff to coordinate on potential projects with the development sector.
12/2017	Refine the County's Stormwater BMP Database	Refined Database	DPW	Previous 2014-2015 milestone. In Progress. The County initiated a contract in 2016 to research and update historic stormwater BMP records. As of November 15 over 1,532 grading permits representing over 4,800 BMPs had been reviewed for data accuracy and updating, including drainage area delineation.

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On-going	Identify, prioritize and establish a schedule for joint SHA/AACo. implementation projects	Prioritized list of WIP restoration projects and associated map identifying SHA projects, AACo projects, and location of joint implementation projects. List and map accompanied by a coordinated implementation schedule.	DPW	Previous 2014-2015 milestone. A Memorandum of Understanding (MOU) has been executed between AACo. and SHA. AACo. and SHA continue to meet to coordinate WIP implementation projects, identify opportunities for collaborative implementation, monitor progress and allocate potential TMDL credits.
12/2017	Develop a Memorandum of Understanding (MOU) to execute joint City of Annapolis/AACo. implementation projects.	MOU and prioritized site list of projects and associated map identifying project locations.	DPW	New milestone added in 2016 by the WPRP Restoration Unit. An MOU with the City of Annapolis was executed in October 2016.
12/2017	Develop a MOU to execute joint MDTA/AACo. implementation projects.	MOU and prioritized list of projects and associated map identifying project locations.	DPW	New milestone added in 2016 by WPRP Restoration Unit. A MOU was executed in January 2017.

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On-going	Improve Federal, State and County permitting process for restoration projects	A permitting process that reduces the amount of time to secure Federal, State and County permits for restoration projects.	DPW	Previous 2014-2015 milestone. Ongoing. In August 2016, MDE rolled out a streamlined permitting process for restoration projects in coordination with several counties. In addition, regular MDE/Army Corps coordination have been initiated.
On-going	Require new development to provide an adequate, stable outfall for stormwater discharges from their site into receiving waterways.	Continue to implement adequacy of public facilities regulations as they pertain to outfall adequacy.	OPZ	Milestone added in 2014-2015. Since the adoption of the new State stormwater management regulations by Anne Arundel County in 2011, the County has required a demonstration of outfall adequacy, not just in terms of downstream flooding, but also stability. This work is in addition to the stormwater management requirements otherwise required for new development.
12/2017	Work with the Bureau of Highways to determine the feasibility of utilizing pervious concrete on new impervious area	Draft standards	DPW	New 2016-2017 milestone. The Dept. of Public Works utilizes pervious concrete on a case by case basis where appropriate.
12/2017	Work with the Bureau of Highways to determine the feasibility of installing dry well/infiltration basins in manhole footprints	Draft standards	DPW	New 2016-2017 milestone. Concurrence achieved with the Bureau of Highways to conduct a pilot study of 3-5 sites under existing roadways. Negotiated with the Department of Recreation and Parks to place 2-3 dry wells at Arden Park under an existing parking lot. Construction at Arden Park anticipated to be under construction in February 2017.

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12/2015	Examine the County's current street-sweeping program to determine opportunities for expanding the current program to allow monthly sweeping of all curbed roads.	Targeted street sweeping program	DPW	Previous 2014-2015 milestone. During calendar year 2016 the County conducted twice monthly sweeping along a portion of its road network entirely through contracted street sweeping services. Currently, the County is targeting those curbed streets with high traffic volumes, business/industrial parks, NPDES priority areas, and select County parking lots subject to 12-SW SWP3 Plans.
12/2015	Examine the County's current inlet cleaning program to determine opportunities for expanding the current program to allow routine cleaning of storm inlets.	Targeted inlet cleaning program	DPW	Previous 2014-2015 milestone. During calendar year 2016 the County's Bureau of Highways (BOH) procured (1) specialized dewatering roll-off can in order to capture the weight of vacuum truck collections from storm inlet cleaning by segregating these collections from other debris collections and generating individual scale house tickets for tracking purposes. In addition, two (2) additional vacuum trucks and one (1) replacement vacuum truck were delivered (purchased) to the County in July 2016 for use by the inlet cleaning program. The FY18 budget request will include a proposed expansion of street sweeping services in the County.
Ongoing	Coordinate the Bureau of Highways (BOH) rehabilitation projects with the Bureau of Engineers (BOE) WIP implementation projects to maximize opportunity for load reduction.	Convert Infrastructure Management Division's (IMD) culvert and storm drain rehab data base to a geospatially referenced map.	DPW	Previous 2014-2015 milestone. A subset of the projects in the IMD database for which the County is taking restoration credit was submitted as part of the MS4 Geodatabase ALTBMPLine feature class. These projects are listed as Outfall Stabilization under project type with the following descriptions: 1069 Locust Drive, 1526 Puffin Court, Seaborn Drive, Arundel Ave., and Tam Glade.

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12/2015	Complete hiring staff authorized in the FY14 and proposed in the FY15 budget to augment existing staff to address culvert and closed storm drain issues and closed storm drain maintenance (e.g. inlet cleaning).	Hire 10 positions in the Bureau of Highways	DPW	Previous 2014-2015 milestone. Five (5) positions, one engineer and 4 construction inspectors, in the Infrastructure Management Division (IMD) were lost as a result of budget cuts in FY17. All other funded positions have been filled.
12/2017	Refine list of potential reforestation sites to develop a geo-referenced database of publically owned sites suitable for planting.	Database of viable properties for tree planting	DPW I&P	New 2016-2017 milestone. In progress. Geo-referenced database is being updated. County-owned parcels for reforestation have been evaluated with GIS and Geocortex, mapping tools, and ranked as “excellent, good, OK, or poor” candidates for reforestation. County-owned parcels ranked “excellent” comprise 155 acres of potential new forest land. A preliminary field assessment of “excellent” County-owned candidate parcels is underway.

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12/2017	Review implementation of restoration projects to determine County's progress towards achieving the 60% stormwater load reduction goal by 2017.	Midterm evaluation	DPW	New 2016-2017 milestone. Implementation of the restoration projects to meet load reductions continued in FY16. Based on completed stormwater restoration efforts through the end of FY16, the County has achieved a cumulative TN reduction of 12, 171 lbs. per yr., which is 10% of the reduction required to meet the 60% 2017 interim target load reduction and 6% of the reduction required to meet 2025 load reduction target. The County has achieved a TP reduction of 3,853 lbs. which is 24% of the reduction required to meet the 60% 2017 Interim Target Load and 15% of the reduction required to meet the 2025 load reduction target. For TSS reductions, Maryland's Phase II WIP assumes that if TP reduction is met TSS reduction is met. The County's July 2, 2013 Phase II WIP includes a three part strategy to achieve the necessary load reductions. With the continued implementation of upgrades to the County's WWTPs, by the end of 2015, Anne Arundel County is producing approximately 100,000 lbs. of nitrogen less than its load caps and will be producing approximately 230,000 lbs. of nitrogen less than its load caps by the end of 2017 at its wastewater treatment plants. This load reduction will help offset any shortfalls in the stormwater load reductions.

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On-going	Engage Watershed Organizations in WIP implementation	Achieve engagement of and coordinate watershed organizations within the County in watershed implementation projects.	DPW	Previous 2014-2015 milestone. Watershed organizations are active in restoration projects throughout the County with a focus on the central part of the County. New organizations are beginning to engage in the northern portion of the County. WPRP staff interacts with and assists with these organizations and routinely corresponds with them to direct them toward potential projects as well as to share information. WPRP staff provides technical input on restoration projects undertaken by watershed organizations when requested. WPRP staff also maintains a list of contacts that are interested in watershed issues and connects individuals and organizations with opportunities to advance TMDL WIP initiatives. WPRP actively engages in conversations with established and new NGOs to determine organizational needs and best ways to support those needs.

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On-going	Work in collaboration with watershed organizations to leverage and secure grant funding for implementation projects.	Letters of Support for grants to local watershed organizations that provide funding for restoration projects. In kind match on projects that achieve load reduction.	DPW	Previous 2014-2015 milestone. The Dept. of Public Works continued to provide letters of support to NGOs for grant applications for standard restoration projects and innovative practices. He County continues to provide funding for its <i>Anne Arundel County Watershed Restoration Grant</i> in collaboration with the Chesapeake Bay Trust. L The grant has funded thirteen (13) viable projects in its first two years. Seven (7) of the thirteen projects have been built, with the remaining six (6) in the design and permitting phases. The application due date for the third round of grants was 12/5/2016. Eight (8) applications were received and are being evaluated. More information on the grant program can be found at: <a href="http://www.cbtrust.org">www.cbtrust.org</a> . The County continues to provide support and to partner with UMCES (University of Maryland Center for Environmental Science) on a project to research hypoxia and nutrient budgeting in the Rock Creek estuary.
On-going	Collaborate with the Anne Arundel Watershed Stewards Academy (WSA) to Train community leaders to coordinate residential restoration and stormwater outreach	150 hours of training to certify 50 master Watershed Stewards and provide continuing education to 100 additional Stewards. Convene two annual conferences to network stormwater professionals, government officials and Stewards. Provide support services and networking for 150 Stewards.	DPW	Previous 2014-2015 milestone. Deliverable updated to reflect 2016-2017 goal. During 2016, WSA continued training its 8 <sup>th</sup> class of Master Watershed Stewards, and recruited and began training for its 9 <sup>th</sup> Class. The Steward Certification Course was re-vamped and updated to include the latest restoration science and new outreach topics, including a specialized track for Stewards who want to work within school settings. During 2016, Class 8 Steward Candidates completed capstone projects and graduated. The graduating class was composed of 17 total Master Watershed Stewards, including 6 from faith congregations. Communities represented spanned from Linthicum in the northern section of the County to Churchton in the southern

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				<p>section of the County. This year's class represented the largest percentage of under-represented communities yet (ethnically or geographically under-represented in overall restoration efforts). A total of 63 hours of instruction were provided to Master Watershed Stewards from classes 8 and 9, for a total of over 1,300 person hours of training. Continuing Education classes were held for both Stewards and Environmental professionals including: EnviroCert, Native Plant Identification, Grant Writing and Project Management, and Buffer Planting, for a total of 15 hours to over 100 people for a total of 1,500 person hours of training. Four networking sessions were also held for certified Steward collaboration. WSA's 5<sup>th</sup> annual conference was held on Saturday, February 27<sup>th</sup>, and was attended by 220 Stewards, Consortium and restoration advocates. In addition, support services were provided to over 170 Maser Watershed Stewards and candidates, including connection with professional services, increased outreach and restoration materials and ono-on-one mentoring.</p>

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On-going	The Watershed Stewards Academy will support community leaders to coordinate residential restoration and stormwater outreach.	200 rain barrels installed. 15,000 native plants and trees planted. 500,000 square feet of new residential and community restoration installed. Direct outreach and education on stormwater awareness topics to over 20,000 citizens. Tracking, maintenance and /or renovation of all Steward projects over three years old- except rain barrels.	DPW	Previous 2014-2015 milestone. Deliverable updated to reflect 2016-2017 goal. In 2016, the WSA continued cultivating community leaders to take action to improve their local streams, including ongoing work with houses of worship. In 2016, WSA and Master Watershed Stewards engaged over 7,000 people, in volunteering and learning about watershed issues; installed over 100 water harvesting devices (rain barrels or cisterns) resulting in the capture of 11,000 gallons of water; and planted over 15,000 native trees and shrubs in over 71,642 square feet of restoration. A restoration tracking database has been created and is being populated with past projects, and inspection/monitoring status. New projects will be added for 2017.
12/2015	Develop a Clean Water Communities Certification. Work with WSA to explore ways that the WPRP can incentivize communities to achieve Clean Water Communities Certification. Augment the online resources provided by the DPW WPRP to provide greater connection between citizens, the WPRP and action to reduce stormwater originating from residential property.	Pilot the Clean Water Communities certification in two communities including the installation of 28 homeowner BMPs and promotion of two behavior change campaigns to reduce polluting behaviors in pilot communities. Expanded website and mapping resources to connect citizens with the WPRP and to incentives for individual actions to reduce stormwater.	DPW	Previous 2014-2015 milestone. Completed during 2014-2015 milestone period.

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12/2017	Gather baseline information on knowledge of stormwater possessed by residents in Anne Arundel County	In order to determine the type and extent of education and outreach that needs to be carried out, and to evaluate the success of outreach programs it is important to establish a baseline from which progress can be determined.	DPW	New 2016-2017 milestone. During 2016, WPRP secured grant funding from the Chesapeake Bay Trust to partner with the Chesapeake Bay Program's Citizen Stewardship Team in order to implement a County-wide survey on citizen stewardship. As of the end of 2016, a draft of the survey has been completed and is being reviewed. It is anticipated that the survey will be implemented in early 2017.
12/2017	Raise awareness of healthy practices and stewardship throughout the County	Targeted outreach and education materials: e.g. surveys, social media, print materials.	DPW	New 2016-2017 milestone. Throughout 2016, WPRP has promoted healthy practices through its social media outlets, community events and presentations. In addition, several "tip cards" promoting healthy practices were distributed at e vents. It is anticipated that specific targeted outreach will be developed based on the results of the citizen survey due to be launched in early 2017. WPRP continues to support the Anne Arundel County Watershed Stewards Academy (WSA) and the Chesapeake Connections Program operated out of Arlington Echo Outdoor Education Center in their endeavors to promote healthy practices throughout the County.

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12/2017	Explore collaborative partnerships that can benefit the overall watershed	In cooperation with County agencies, local watershed groups, and other community organizations develop educational strategies consistent with the Chesapeake Bay TMDL priorities to increase awareness of contaminant sources and BMPs to limit contaminants from reaching County waterways and the Chesapeake Bay. This could include supporting projects that build on awareness and knowledge and connect back to the community	DPW	<p>New 2016-2017 milestone. WPRP, through its Watershed Restoration Grant Program, and other partnerships, has been able to promote specific watershed restoration projects and practices to a wider audience than in previous years. These new partnerships continue to present opportunities to further promote WPRP goals and objectives while also promoting community-based projects and accomplishments that align with those goals and objectives.</p> <p>Additionally, in 2016 WPRP partnered with the University of Maryland Partnership for Action Learning in sustainability (PALS) to develop a one-time course for the Spring 2017 semester. L Students in the course will be tasked with conducting research on various outreach and educational parameters of Anne Arundel County's MS4 permit. Teams of students will develop and test prototypes of marketing tools, collection techniques and end product usage options.</p> <p>WPRP continues to support the Anne Arundel County Watershed Stewards Academy (WSA) and the Chesapeake Connections Program operated out of Arlington Echo Outdoor Education center.</p>

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12/2017	Develop and implement a training workshop for community stormwater BMP maintenance.	Training workshop	DPW	New 2016-2017 milestone. WPRP is currently finalizing BMP maintenance fact sheets for HOA's and other community organizations that are responsible for maintaining private and community owned BMPs. The suite of BMP fact sheets under development include: wet/dry ponds, rain gardens, infiltration trenches, buried dry wells, bioretention, grass swales and permeable paving. The fact sheets will address recommended maintenance procedures and schedules, and troubleshooting tips.
12/2016	Increase existing outreach and education initiatives through the implementation of a County-wide pet waste campaign	Fact sheets. Informational material.	DPW	New 2016-2017 milestone. Throughout 2016, WPRP has promoted proper pet waste practices through its social media outlets, and at community events and presentations. In addition, a "tip card" promoting proper pet waste practices was distributed at events. WPRP also distributed 250 pet waste bag holders at the 2016 Anne Arundel County Fair. More specific targeted outreach regarding pet waste is expected to be developed pending the outcome on the citizen survey to be launched in early 2017. Findings from the Spring PALS course will also be utilized in the development of outreach plans.
12/2017	In addition to County Parks that have already installed pet waste stations, explore opportunities to install pet waste stations on other County properties.	Installation of additional pet waste stations	DPW Central Services	New 2016-2017 milestone. It is anticipated that as part of the PALS course at the University of Maryland an informal inventory of current pet waste stations at County parks will be conducted. Those findings will help determine priority locations for future installations.

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12/2017	Determine the effectiveness of a Countywide pet waste campaign through monitoring and research to verify water quality benefits of this BMP.	Report that includes findings and adaptive management strategies for achieving expected load reductions	DPW	New 2016-2017 milestone. The County completed a TMDL Restoration Plan for Bacteria in 2016. One of the strategies in the plan is an Expanded Pet Waste Education Program that involves implementing a multi-media-based pet waste education program to instill behavior change in pet owners and reduce loads from pet waste. During 2016 the County highlighted pet waste management through Facebook postings and handed out dog waste bags at the County Fair. These expanded education efforts and the findings of the PALS course will be incorporated into a more structured pet waste management initiative that will then be evaluated for its effectiveness.
12/2017	Explore strategies that result in increased management of sewage discharges from boats.	Expanded marina outreach programs and support for the State's Clean Marina Program	DPW	New 2016-2017 milestone. In 2016, WPRP partnered with MD DNR's Clean Marinas Program in order to promote awareness and usage of certified Clean Marinas in Anne Arundel County. Along with a specific "Responsible Boating" website and prompts on social media, WPRP developed an interactive web-based mapping application that pinpoints all Clean Marinas in the County. Plans to include all pump-out stations located in the County are under development. Additionally, NGOs are advocating the creation of a Countywide "No Discharge Zone".

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12/2017	Collaborate with the Anne Arundel Watershed Stewards Academy (WSA) to create and implement a new communication and technology strategy for Certified Stewards to report their stewardship activities and those of their communities so that the metrics collected accurately reflect the pollutant loads reduced through residential scale BMPs.	Increased reporting of Steward projects and a more robust measurement of projects implemented as a result of Steward presence in a community.	DPW	New 2016-2017 milestone. A series of clarifying meetings between WPRP and WSA were held in 2016 and yielded an increased clarification of measurements of small scale restoration projects. A project tracking database was created to accurately capture and track both new and existing projects and inspection/monitoring data. The new online data entry spreadsheet was refined for Stewards based on these new protocols.
12/2017	Support the Anne Arundel Watershed Stewards Academy in developing and implementing educational programs for community leaders without the time or ability to attend the full Master Steward Certification Course. This training may be called Steward Lite.	Fifty (50) hours of training provided to approximately thirty (30) community leaders.	DPW	New 2016-2017 milestone. Three under-represented faith congregations were recruited for the new Steward Lite program. Each faith congregation received a compressed watershed training (15 hours total) for 20 congregants from each congregation for a total of 60 “congregational stewards” trained, a total of 900 training hours provided. A stormwater assessment was completed at each house of worship. Stormwater projects were selected by the congregations and are in the process of design. 14 residential sites were selected for stormwater assessments. Designs for stormwater projects were completed and approved by the homeowners for each site. 8 sites have been installed. The remaining 6 sites will be installed in spring 2017.
<b>Wastewater Source Sector</b>				

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12/2017	Complete construction of all new ENR facilities and optimize performance.	Conditional acceptance for contracts	DPW	Previous 2014-2015 milestone revised to reflect 2016-2017 goals. Ongoing. ENR upgrades at Annapolis, Broadwater, Maryland City, and Patuxent treatment facilities have been completed. The upgrade at Broadneck is under construction. The decommissioning of the Mayo facility is in progress.
1/2017	Maintain progress on Cox Creek WRF-ENR construction project	On-going construction work	DPW	Previous 2014-2015 milestone revised to reflect 2016-2017 goals. Ongoing. Work expected to be completed in 2017.
12/2016	Explore utilizing performance below pollution load caps as a way to extend the County's compliance schedule for other pollution sectors	Nutrient trading framework	DPW	Milestone added in 2014-2015. Ongoing. The County has been involved in ongoing nutrient trading discussions with State personnel.
<b>Septic Source Sector</b>				
	<b><u>Large CIP Program</u></b>			
12/2017	Determine long term funding methods to pay for connection of existing OSDS to public sewer and cluster treatment systems.	Financial Plan for implementing program	DPW	Previous 2014-2015 milestone. Further development on this milestone expected through OSDS Program Manager.
12/2018	Develop mechanisms and policies to achieve funding.	Formal establishment of revised rates or fee structures via legislative action by County Council	Budget Office	Previous 2014-2015 milestone. Further development on this milestone expected through OSDS Program Manager.

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12/2018	Modify the County Code and administrative procedures as needed to provide authorization for the program	Legislative code changes	Law Office	Previous 2014-2015 milestone. Pending. Further progress on this milestone expected through OSDS Program Manager.
12/2014	Develop a tracking and reporting system to follow the progress of OSDS conversion and upgrades	Reporting forms and transmittals. Database sharing as needed.	DPW	Previous 2014-2015 milestone. Complete. Database sharing has progressed. Formal reporting formats have not yet been established.
12/2017	Determine staffing requirements and pursue position authorization within the Dept. of Public Work, Dept. of Inspections & Permits, and Office of Planning & Zoning to support the expected workload.	Requests for position authorization	Multiple Agencies	Previous 2014-2015 milestone. Ongoing. County has recently added two staff members in Utility Planning and Utility Design. These are available to provide in-house support for the program.
12/2017	Develop scope descriptions and tasks for workload to be delegated using staff augmentation contracts.	Procurement of contract(s) for management of specific portions of the program.	DPW	Previous 2014-2015 milestone. Further development on this milestone expected through OSDS Program Manager (“Strategic Planner”).

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12/2017	Review and clarify legal and administrative policies to connect existing OSDS to public sewer and cluster treatment systems.	Internal legal brief(s)	Law Office	Previous 2014-2015 milestone. Further development on this milestone expected through OSDS Program Manager.
12/2017	Review and clarify permitting requirements to connect existing OSDS to public sewer and cluster treatment systems.	Internal memorandum	DPW OPZ	Previous 2014-2015 milestone. Pending. Further progress on this milestone expected through OSDS Program Manager.
4/2018	Develop Countywide Public Relations Strategy.	Written strategy for engaging the public and providing timely and accurate information.	DPW	Previous 2014-2015 milestone. Further development on this milestone expected through OSDS Program Manager.
12/2019	Develop new requirements and boundaries for the proposed Cluster Treatment Areas for incorporation into the Water and Sewer Master Plan.	Updated Master Plan areas as needed.	DPW OPZ	Previous 2014-2015 milestone. Pending. In 2016 the County initiated Contract X764254 – Minor System Takeover Study to examine the feasibility of upgrading existing small treatment systems and incorporating nearby septic systems. Further development on this milestone expected through OSDS Program Manager.

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12/2018	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.	Proposed legislation as needed	Law Office	Previous 2014-2015 milestone. Further development on this milestone expected through OSDS Program Manager. Other options may be implemented as determined by the administration.
12/2018	The Dept. of Public Works and the Health Department will work collaboratively to develop technical standards for new cluster systems capable of nitrogen removal.	Standard specifications and details as needed	DPW	Previous 2014-2015 milestone. On Hold. Use of cluster systems may be limited and development of standard specifications and details may not be warranted.
12/2016	Pursue new State legislation to allow communities to use a Special Community Benefit District (SCBD) to cover community costs for septic to sewer conversions	Proposed legislation as needed	County Administration	Previous 2014-2015 milestone. Pending Further development on this milestone expected through OSDS Program Manager (“Strategic Planner”)
	<b><u>Small CIP Program</u></b>			

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12/2017	Determine whether the program will be voluntary-only or a combination of mandatory and voluntary, and develop the necessary administrative procedures or legislation.	Small CIP Program Implementation Plan	DPW Law Office	Previous 2014-2015 milestone. Pending. Further development of this milestone expected through OSDS Program Manager.
12/2017	Determine how costs will be shared by existing homeowners.	Small CIP Program Implementation Plan	DPW –	Previous 2014-2015 milestone. Pending. Further development on this milestone expected through OSDS Program Manager.
N/A	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.	N/A – will be incorporated into the program fee structure	DPW –	Previous 2014-2015 milestone. Further progress on this milestone is not anticipated during the 2016-2017 milestone period. This milestone has been recommended for deletion for future reporting.
12/2017	Explore incentive systems for individual homeowners to increase interest in voluntary participation.	Summarize options in internal memorandum	Various	Previous 2014-2015 milestone. Pending. Further development on this milestone expected through OSDS Program Manager.

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12/2017	Develop a system in coordination with the Department of Health for identifying and prioritizing areas to determine upcoming projects to be performed each year.	Finalized Prioritization System	DPW	Previous 2014-2015 milestone. Ongoing. The County opened Contract X764250 – “HDPA Prioritization” to develop a ranking matrix for the onsite wastewater management problem areas.
N/A	Develop a public outreach program to notify neighborhoods of upcoming projects.	N/A – Will be incorporated into the public relations strategy	DPW	Previous 2014-2015 milestone. Further development on this milestone expected through OSDS Program Manager.
12/2017	Determine an annual funding level for the program implementation.	Set yearly appropriation level for contract(s).	DPW	Previous 2014-2015 milestone. Pending. Further development on this milestone expected through OSDS Program Manager.
12/2017	Determine staffing requirements within the Dept. of Public Works and the Health Dept. to support the program.	Requests for positions where determined necessary	Various	Previous 2014-2015 milestone. Pending. Further development on this milestone expected through OSDS Program Manager.
	<b><u>Private Sector Facilitated Upgrades</u></b>			

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12/2017	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	Published guidance regarding requirements for new development in accordance with Growth Tiers.	DPW OPZ	Previous 2014-2015 milestone. On Hold. Growth Tiers have been published by OPZ. Consideration will be given as to whether additional policy guidance is needed.
12/2015	Develop new policies to further reduce nutrient loading from future OSDS.	Internal meetings to review additional policies to encourage additional OSDS load reductions.	DPW OPZ	Previous 2014-2015 milestone. The County has received inquiries regarding connection credits to be provided to developers. Further discussions will be held in 2017. Legislation has been introduced to the County Council to establish a Rural Conservation Line that would further protect existing rural areas from excessive development.
2017	Create a Septics Task Force to further implementation of the septic component of the County's Phase II WIP.	A set of fiscal and policy recommendations to facilitate the implementation of the County's Phase II WIP septic component.	DPW	New 2016-2017 milestone established January 2017. First meeting of the Task Force is scheduled for 2/21/2017. Preliminary information about the Septics Task Force can be found at: <a href="http://www.aacounty.org/departments/public-works/wprp/septic-task-force/index.html">http://www.aacounty.org/departments/public-works/wprp/septic-task-force/index.html</a>
	<b><u>OSDS Nitrogen Reducing Units</u></b>			

Target Date	Milestone	Deliverable	Lead Agency	Comments
On-going	Provide educational materials to the public on septic system maintenance	Educational materials; DVDs, septic system records, scheduled maintenance folders and brochures.	Health Dept.	Previous 2014-2015 milestone. Four hundred and thirty-four (434) information packets were distributed during calendar year 2016. These information packets are sent to every septic system inspected by the Health Dept. The information packet includes a cover letter that provides the Health Dept.'s web address <a href="http://www.aahealth.org">www.aahealth.org</a> for more information. The website also contains videos on septic system maintenance in YouTube format. In addition to the cover letter, the information packet also includes a brochure on maintaining a septic system; a list of licensed liquid waste haulers; and a folder that is labeled to facilitate record keeping for maintenance of the septic system. Additionally, Health Dept. staff gives presentations on septic system health and maintenance upon request to a variety of organizations.
12/2018	Implement a Voluntary Pump-out Program	Program Development and implementation.		New milestone added in 2016 by the Health Dept. This program will be developed and implemented with existing Health dept. staff to track properties that provide records of septic tank pumping. Development of the program is expected to begin in FY18. Once developed, funding will be required for additional public outreach to promote the program.

Target Date	Milestone	Deliverable	Lead Agency	Comments
On-going	Enforcement of Property Maintenance Code requirements	Enforcement of identified Code violations involving improper maintenance of septic systems.	Health Dept.	Previous 2014-2015 milestone. The Health Dept. continued to enforce the requirements of the Anne Arundel County Property Maintenance Code (PMC) that requires property owners maintain their septic systems 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. Sixty-eight (68) cases of violations of the PMC were enforced involving overflowing or failing OSDS during 2016.
On-going	Maintain accurate inventory of developed accounts served by on-site disposal systems.	Accounts with accurate septic system information.	Health Dept.	Previous 2014-2015 milestone. Continue to develop and perform quarterly updates to accurately assess the inventory of developed accounts served by on-site-sewage disposal systems. This inventory is critical to the assessment of the State's Bay Restoration Fund, and to ensure accurate accounting of nitrogen reducing units and Best Available Technology for tracking purposes. The Dept. of Health conducted quarterly assessments of the inventory and provided the listing of developed properties with OSDS and number of users of each OSDS to the Office of Finance for billing purposes.

<b>Target Date</b>	<b>Milestone</b>	<b>Deliverable</b>	<b>Lead Agency</b>	<b>Comments</b>
On-going	Work with private sector firms to encourage innovative and lower cost solutions to on-site septic treatment.	Coordinate with MDE and local agencies to make Anne Arundel County a testing ground for innovative OSDS technologies	DPW/ Health Dept.	Milestone added in 2014-2015. During 2016 Anne Arundel County participated in discussions with Elm Street Developers to pilot a local BAT OSDS technology in the County in parallel with the testing of the technology by the National Science Foundation (NSF).The technology received NSF certification and patent approval. However, recent policy developments in the State of Maryland have reduced the potential for BAT systems making it unlikely that further investment in the development and installation of innovative septic systems in Maryland will occur.