

Prince George's County 2014–2015 Programmatic Two-Year Milestones

Target Date	Milestone	Deliverable	Lead Agency	Comments/Status Updates
Urban Stormwater – Organization/Financing				
2014	Prince George's County received its new MS4 permit, which was issued on January 2, 2014. The County is aware of the new requirements and had already started to and will continue to prepare for its implementation.	n/a	DER (Now DoE), DPW&T	The County is continuing to implement the new permit requirements.
2014	<p>As mandated by Maryland HB 987, Prince George's County has created the new Stormwater Fee Structure to provide additional funding (in addition to its existing Stormwater Tax) necessary in future years to support its water quality related programs to meet WIP mandates. Currently, it generates approximately \$12,000,000 every year. The County will evaluate the adequacy of this revenue using the following milestones:</p> <p>1 - The County plans to update its CIP for 2015–2020 to reflect the needs for stormwater BMP installations for WIP implementation.</p> <p>2 - The County will fund capital improvements projects and NPDES program through both the Stormwater Management Tax and this new Stormwater Fee.</p> <p>3 - The County will aggressively seek and apply for all grant funding opportunities from various Federal and State agencies to assist in WIP implementation. The goal for next few years is \$10,000,000 every year.</p> <p>4 - The County will complete a study that will evaluate funding sufficiency to see if any adjustment is needed for both the existing Stormwater Tax and the new Stormwater Fee.</p>	<p>Stormwater management project funding.</p> <p>Funding study.</p>	DER (Now DoE)	<p>This milestone is an updated version of project funding 2012–2013 milestones.</p> <p>1 - The County updated its CIP for 2015–2020 to reflect the needs for stormwater BMP installations for WIP implementation.</p> <p>2 - The County continues to fund capital improvements projects and NPDES program through both the Stormwater Management Tax and Clean Water Act Fee.</p> <p>3 - The County continues to seek and apply for all grant opportunities.</p> <p>4 – The Clean Water Act fees are subject to fee reductions from credits given to taxpayers for BMP implementation. This will lead to a long-term decrease in revenue. The County will be performing a long-term analysis to ensure sufficient funds are available for restoration activities.</p>
2014/ 2015	DER will continue developing an organizational plan that includes the responsibilities of existing staff and new hires and a schedule and funding strategy for new hiring to appropriately implement WIP.	Organizational plan, new positions	DER (Now DoE)	<p>DER has included in its FY2014 budget 10 new positions and 8 new positions for FY 2015 to support these mandates.</p> <p>The organization plan was completed in 2014 and resulted in DER</p>

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				transitioning into the Department of the Environment (DoE). The new structure reflects the objectives and projects in the WIP and NPDES MS4 permit. DoE will also be performing some reorganization to accommodate necessary resources to achieve WIP and restoration plan objectives.
2015 (1 year after issuance)	Prince George's County will develop a long-term schedule for completing detailed assessments for each County watershed and waste load allocation implementation plans for each TMDL. These reports are to be submitted to MDE within one year of issuance, which was January 2, 2014.	Long-term implementation schedules for watershed implementation plans	DER (Now DoE)	The County developed a watershed restoration plan for each County MS4 WLA in local TMDLs. These plans included a schedule and were submitted to MDE on December 30, 2014.
Urban Stormwater – Research				
Phase I: 2014 Phase II: 2015	Prince George's County initiated a two-phase research study with the University of Maryland (UMD) to determine BMP efficiencies for new technologies to reduce nutrients in a more cost effective manner. The preliminary research results are very encouraging. For instance, the removal efficiency for total phosphorus is reaching approximately 90 percent with the new design materials. For Year 2014–2015, the County will continue this effort with UMD. Phase I of this study will be completed within the next two years (2014–2015) and Phase II should be completed in 2016. The strategy requires full partnership of MDE and EPA to ensure that the County reaches its 2017 and 2025 goals.	Phase I: Initial set of BMP efficiencies. Phase II: Initial set of BMP efficiencies	DER (Now DoE)	This is a continuation of a 2012–2013 milestone with additional funding and scope. The research, with Dr. Davis at UMD, is ongoing. The research will be completed in 2016.
Urban Stormwater – Tracking				
2014	There is no standardized Prince George's County database for data collection across county agencies. Therefore, the Department of Environmental Resources (DER), the Department of Public Works and Transportation (DPW&T), the Department of Permit, Inspection, and Enforcement (DPIE), Soil Conservation District (SCD), and the Maryland National Capital Park and Planning Commission (M-NCPPC) will continue working together to build a standardized data collection methodology regarding BMPs, land use, permit issuance, and other data related to analyzing existing and future growth and WIP implementation. For instance, DPIE, DPW&T, and DER will enhance the <i>ePlan</i> system to enable the collection of pertinent data	Standardized data collection database.	DER (Now DoE), DPW&T, DPIE, SCD, M-NCPPC	This is a continuation of a 2012–2013 milestone. There is not yet a standardized database. In 2014, the County initiated a multi-departmental committee that is responsible for reporting WIP and restoration plan progress in the MS4 annual report. Recommendations for the committee and requested funding were submitted to Office of

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	in the proper format for reporting WIP progress with respect to new development and redevelopment, in addition to stream/watershed restoration work.			Management and Budget for future program implementation.
2014	The DPIE Site/Road Plan Review Division has and will continue to collect and track data relating to stormwater management BMPs for new development and redevelopment areas. The data will be incorporated into geodatabases and stormwater management design plans in a format that can be migrated to a GIS environment and comply with the standardized format requested by MDE. Data collection and tracking systems will translate to field application with respect to the enforcement and inspection of sediment and erosion control during construction activities. DPIE will work with DER to ensure that BMPs are not double counted between County databases.	Geodatabase Protocol for not double-counting BMPs	DPIE	This is a continuation of a 2012–2013 milestone. A newly created geodatabase was designed to meet the County's Urban BMP database MS4 reporting requirement for permitting, review activities, and construction enforcement. DPIE updated the DoE database with all BMPs associated with closed permits through the end of 2014. DPIE plans on continuously updating this information in the future.
2015	Prince George's County will continue field-verifying existing BMPs that are missing BMP information in the County database. The County will finalize the BMP database with updated drainage areas and update its BMP information with MDE. That will allow the County to receive credit for existing BMPs that are not reportable because of a lack of information.	Finalized BMP database	DER (Now DoE)	DoE completed the reconciliation of BMPs from CIP implementation and those provided through the development process. The database was submitted to MDE as part of the 2014 annual MS4 report.
Urban Stormwater – Program Implementation				
2014	Prince George's County has adopted a new stormwater management ordinance (CB 15), which references the County Code to update stormwater regulations and encourage environmental site design (ESD) to the maximum extent practicable (MEP), green building for retrofit, redevelopment and new development in line with MDE stormwater management water quality requirements. Beginning in 2013, DPIE will be required to provide the County Council with an assessment of compliance with the Stormwater Management Ordinance as required by Section 32-201 of the Prince George's County Code.	Annual report detailing the assessment of compliance to the Stormwater Management Ordinance	DPIE	This is a continuation of a 2012–2013 milestone. The first annual report was submitted in January 2014. The County is on track to submit their second annual report on time to the County Council.
2014	DPW&T will continue implementing a program to identify rural roadways that could be considered treated because of being hydrologically disconnected. That will be accomplished using GIS to identify the rural roadways that will be credited and removed from	Database with information on the identified rural roadways.	DPW&T	This is a continuation of a 2012–2013 milestone. DPW&T met with MDE in August

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	<p>the County's total untreated impervious surface area. The process will entail field verification to ensure that the roadways qualify per the MDE June 2011 draft document, <i>Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated</i>.</p>			<p>2014. DPW&T and their consultant (WBCM) made a presentation identifying the protocol that they intended to use to accomplish this milestone. MDE requested that DPW&T submit a proposal for consideration. WBCM is in the process of completing the Pilot Study to submit to MDE. The Pilot Study purpose is to demonstrate the process that will be used on the swales across the entire County. WBCM is analyzing the LIDAR data for swales beyond the ones identified using PAMS data. The initial runs showed approximately 340 acres of impervious roadways draining to qualifying swales. WBCM will complete field investigations on the qualifying swales and compile a geodatabase/shapefile for the final submittal to MDE with swales and associated drainage areas. WBCM anticipates submitting the Pilot Study in February 2015 to MDE and completing the study by May 2015.</p>
2014/2015	<p>The County has legislation for a <i>Complete and Green Streets</i> policy under subtitle 23, Division 7. DPW&T will continue reducing the existing untreated impervious surfaces through the Green Complete Streets Program Initiative. The program will include BMPs such as water quality treatment facilities or reducing impervious surfaces among other sustainable efforts to comply with MDE ESD to the MEP.</p>	Completed Green Streets projects.	DPW&T	<p>This is a continuation of a 2012–2013 milestone. This milestone is currently ongoing. To date, 10 projects have been started and are in various engineering phases, in addition evaluation of specifications and standards to incorporate green components. DPW&T has been meeting with agencies to identify ESD devices that could be allowed within the right of way. A test case project is being allowed to determine functionality and to help devise</p>

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				<i>working standards</i> as a starting point for developing future projects with feasible right of way practices.
2015	Prince George's County has developed a residential stormwater benefits program (Rain Check Program) that is similar to Montgomery County's Rainscapes program. The program would promote technologies, such as rain gardens, rain barrels, dry wells, and permeable pavement on residential areas. The program will be fully implemented in 2015.	Fully implemented program.	DER (Now DoE)	<p>The program was established on June 24, 2012 through CB 40-2012: <i>Stormwater Management Retrofit Program</i>, as part of the 2012-2013 milestones.</p> <p>In 2014, there were 79 Rain Check Rebate applications, with 52 approved, 12 denied, and 15 being processed as of the beginning of January 2015. Preliminary estimates show that the approved applications will treat almost 38,000 square feet and account for approximately \$28,000 in rebates. Additionally, outreach on the Rain Check Rebate program was part of 16 DoE activities in the County from January through June 2014.</p>
Urban Stormwater – Project Implementation				
2014/2015	<p>DER has hired 13 engineering consultant firms to assist the County in implementing the urban retrofitting efforts. The DER Stormwater Management Division (SMD) is working with consultant teams to evaluate and design retrofit projects associated with the County's inventory of publically maintained stormwater management facilities.</p> <p>For existing stormwater facilities, the retrofit strategy will continue to be to achieve enhanced water quality benefits from modifying existing facilities that were initially designed as <i>dry detention ponds</i> or <i>dry extended detention ponds</i> to facilities such as <i>wet pond</i> or <i>wetland</i> features. The stormwater facilities are currently under evaluation to select candidate sites where impervious area treatment can be maximized, and pollutant removal efficiencies are achievable. Additionally other retrofit opportunities such as stream channel stabilization, wetlands creation, and localized bmp treatment in urban areas will continue to be priorities in the</p>	Completed stormwater facility modification and newly installed BMPs	DER (Now DoE)	<p>This is a continuation of a 2012-2013 milestone and part of the County's WIP implementation efforts that will run through 2025.</p> <p>There are 41 CIP restoration practices currently under design, in addition to 4 in planning, and 4 in construction. These are projected to treat 950 impervious acres.</p> <p>A detailed description of the progress to date is reported in the County's annual MS4 NPDES report.</p>

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	<p>stormwater management strategy.</p> <p>For 2014, on the basis of the current project workload, SMD anticipates to maintain a project inventory of approximately 70 projects in various stages of planning, design, and construction. In 2014, stormwater management construction projects are anticipated to treat 150 acres of impervious surfaces, through pond enhanced retrofits, and BMPs treatment of previously untreated areas.</p> <p>For 2015, on the basis of the current project workload, SMD anticipates to maintain a project inventory of approximately 70 projects in various stages of planning, design, and construction. In 2015, on the basis of this project inventory, stormwater management construction projects are anticipated to treat 230 acres of impervious surfaces through pond enhanced retrofits and BMP treatment of previously untreated areas.</p>			
2014	<p>The Prince George's County Department of Environmental Resources (DER) has developed a new financial/business model to increase the rate of the County's stormwater management CIP project implementation. This new model is called Public Private Partnership (P3) Program.</p> <p>The P3 model that is used for the County's stormwater programs is the Finance-Design-Build-Operate-Maintain option (FDBOM). Through a performance contract, the contractor will be responsible for all of the above tasks. The program would be funded from the new Water Quality Fees as proposed in HB 987. Through this P3 Pilot Program, at least 2,000 untreated impervious acres within the County will be retrofitted by 2017.</p>	Newly installed BMPs	DER (Now DoE)	The agreement for the Clean Water Partnership (formerly known as the P3 Program) will be formally signed in the first quarter of 2015.
2015	The County Council Bill (CB) 40 has established a stormwater management retrofit program for the purpose of providing incentives to individuals, non-profit organizations, commercial businesses and other properties located with Prince George's County, to invest in green stormwater retrofits to improve water quality DER will continue to identify opportunities to work with private nonprofit organizations to evaluate, design and construct smaller BMPs on private properties, to provide treatment of impervious areas to meet the MS4 Permit, and the WIP requirements. DER anticipates that this program may achieve approximately 50 acres of impervious area treatment in	Newly installed BMPs on private properties	DER (Now DoE)	CB40 created two new programs: Rain Check Rebate Program and the Stormwater Stewardship Grant Program through the Chesapeake Bay Trust. These programs have awarded \$1,050,000 in grants.

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	2015.			
Planning – Countywide Green Infrastructure Plan Update				
Late spring 2014	Update the Green Infrastructure network to reflect the regulatory changes implemented in 2010.	Revised network map	M-NCPPC Planning	Regulatory changes included wider minimum stream buffers, additional areas of slopes included in the regulated buffer, and various improvements to the woodland conservation requirements. Network mapping is approximately 30% complete. This project has delayed due to staff being assigned to other projects. The new competition date is expected in fall 2016.
Late spring 2014	Update the Green Infrastructure Plan's policies and strategies to address coordination with the WIP and address common goals.	Revised plan text	M-NCPPC Planning	Grant from NFWF is providing consultant hours to assist staff in writing a staff draft of an update to the text. Text revisions include updated measurable objectives and revised policies and strategies. Plan's measurable objectives will support WIP goals and desired outcomes. This project has delayed due to staff being assigned to other projects. The new competition date is expected in fall 2016.
Planning – Plan Prince George's 2035 General Plan Update				
Fall 2014	Coordinate WIP-related retrofit projects for targeted areas outlined in Plan Prince George's 2035.	List of site locations for potential retrofits based on the Priority Investment Map in Plan 2035.	M-NCPPC Planning and DER	M-NCPPC has provided a list of potential stormwater management retrofit and stream restoration opportunity sites using known sites previously identified in planning efforts since 2011.
December 2014	Develop processes for the Accounting for Growth requirements (not yet published)	Processes and Programs relative to tracking offset growth	M-NCPPC Planning and DER (Now DoE)	M-NCPPC Planning and DoE are awaiting further direction on Accounting for Growth requirements.

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		from new development.		
Planning – Other				
2015	The M-NCPPC Planning Department will complete a future land use map for Prince George's County using community plans. The process will include establishing consistent land use categories for the County.	Updated land use map.	M-NCPPC Planning	This is a continuation of a 2012–2013 milestone. Plan 2035 was adopted by the District Council in May 2014. As part of this effort, a Generalized Land Use Map was created. The department will now develop guidelines for updating the existing land use map for future planning efforts.
Municipal Wastewater Treatment Plants & Onsite Wastewater (Septic) Systems				
December 2014	Continue to work with the Washington Suburban Sanitary Commission (WSSC) to develop a method to track septic systems that are connected to an advanced WWTP. The County does not record how many conversions occur per year. That practice will help the Health Department maintain an accurate accounting of the number of septic systems in the County.	GIS capable spread sheet of information locating the new sewer lines replacing septic systems.	Health (in collaboration with WSSC)	This milestone is ongoing. The Health department has made initial contact with WSSC staff.
January 1, 2015	WSSC will comply with the requirements for the recently reissued MDE General Permit for Discharges From Stormwater Associated with Industrial Activities, permit 12-SW. Under the permit, which becomes effective on 1/1/2014, WSSC will need to update the Stormwater Pollution Prevention Plans at facilities covered by the permit before 1/1/2015. Additional requirements phase in after the first year of the permit.	Updated Stormwater Pollution Prevention Plans at facilities covered by MDE General Permit for Discharges From Stormwater Associated with Industrial Activities, permit 12-SW.	WSSC	Facilities include: Parkway WWTP, Piscataway WWTP, Western Branch WWTP, Anacostia Depot Garage, Anacostia Heavy Equipment Shop, Laurel Depot Garage, Temple Hills Depot Garage. The documentation required to meet stormwater general permit were completed in December 2014 and submitted to MDE prior to the January 1, 2015 due date.
December 2015	Using BRF funds, the Health Department plans to continue replacing septic tanks during the remodeling of failing septic systems in the critical area with nitrogen reducing Best Available Technology (BAT) systems. Septic systems for new home construction will also be using BAT systems.	It is anticipated that at least 24 BATs (12 per year) will be installed during the programmatic year.	Health	There have been nine BAT system tanks installed as of December 2014.
December 2015	Develop a web site link that is an interactive reporting system which allows contractors to update the status of septic pump outs, installation of BATs and inspection and maintenance of BATs.	Interactive web site reporting system	Health (in collaboration with the Office	MDE projects the development of a statewide interactive reporting system by Spring 2015. Beta-testing is

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			of Information and Technology and MDE)	underway for the draft reporting system that will meet the intent of the WIP.
2016	ENR construction schedule for Western Branch WWTP will be completed in 2016.	Completed ENR upgrade	WSSC	The completion of the Western Branch ENR upgrade by the end of 2016 is on schedule.

Prince George's County 2014–2015 BMP Implementation Two-Year Milestones

Stormwater

Prince George's County will continue to assess and identify retrofit project sites and begin implementation. Through 2017, DER will complete 1,422 acres of County impervious area and 186 acres of municipal (not including Bowie) impervious area retrofit per year, in accordance with the County's MS4 permit. The retrofits include planning, design, and construction. This will be partially accomplished through the Public Private Partnership (P3) Program and through incentives to nonprofit organizations, individuals, and businesses. (See programmatic milestones for additional information on these programs.) In addition, in its 2012 NPDES annual report, the County identified 57 projects that are in planning, design, or construction and would treat more than 500 impervious acres. These are summarized below. More complete descriptions are in the County's 2012 annual NPDES report to MDE.

Action	Lead Agency	Progress	Notes
<i>NPDES Planning Phase (377 impervious acres):</i> bioretention (2.2 acres), flow splitter to wet pond (18.3 acres), grass swale (1.5 acres), infiltration basin (6.6 acres), planter boxes (2.2 acres), stream stabilization (11.0 acres/1,100 l.f.), and wetlands [extended detention, constructed, shallow gravel] (322.4 acres)	DER (Now DoE)	<i>CIP 2014 Planning (5.8 impervious acres):</i> bioretention infiltration trench bioswale (0.91 acres), stream restoration (4.5 acres/450 l.f.), stormwater management facilities (0.4 acres)	The original milestone was taken from the 2012 Annual MS4 Report. Milestone update is from the 2014 MS4 Annual Report.
<i>NPDES Design Phase (170 impervious acres):</i> bioretention (3.4 acres), bioretention/Filtrerra/step pools (3.4 acres), constructed wetlands (9 acres) ESD (39.1 acres), porous pavement (0.9 acres), Stormceptor 0.6 acres), stream restoration (81.7 acres/8,176 l.f.), stream restoration/upland restoration (6.2 acres/400 l.f.), stream stabilization (23.16 acres/2,288 l.f.), and stream stabilization/ constructed wetland (2.0 acres/200 l.f.)	DER (Now DoE)	<i>CIP 2014 Design Phase (644 impervious acres):</i> bioretention (6.7 acres), ED wetland (11.8 acres), ED with constructed wetland (64 acres), ED structure, wet (170 acres), flow splitter to wet pond (18.3 acres), impervious acreage removal/stream and slope stabilization (4.5 acres, 450 l.f.), LID stormwater (7.9 acres), rain garden/bioretention/permeable pavers (0.32 acres), retention pond (wet pond) (190.8 acres), stream and slope stabilization (6.3 acres, 625 l.f.), stream restoration (67.8 acres, 6,776 l.f.), stream restoration/upland retrofit (6.2 acres, 620 l.f.), stream stabilization (27.2 acres, 2,120 l.f.), stream stabilization/constructed wetland (2 acres, 200 l.f.), submerged gravel wetland (12.4 acres), SWM pond (6.6 acres), SWM retrofit with constructed wetland (41.5)	The original milestone was taken from the 2012 Annual MS4 Report. Milestone update is from the 2014 MS4 Annual Report.
<i>NPDES Construction Phase (1 impervious acre):</i> stream stabilization (1 acre/100 l.f.)	DER (Now DoE)	<i>CIP 2014 Construction Phase (16.3 impervious acres):</i> bioretention (1.4 acres), permeable pavers (0.9 acres), stream restoration (14 acres, 1,400 l.f.), dredging (284 acres drainage area; Removal of 30,000 tons of sediment; equivalent impervious acres treated not calculated)	The original milestone was taken from the 2012 Annual MS4 Report. Milestone update is from the 2014 MS4 Annual Report.

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<i>NPDES Completed</i>	DER (Now DoE)	<i>CIP 2014 Completed (0.5 impervious acres):</i> bioretention (0.5 acres)	Milestone update is from the 2014 MS4 Annual Report.
Retrofit existing stormwater facilities (e.g., dry ponds). 2014 – 70 projects for 150 acres 2015 – 70 projects for 230 acres	DER (Now DoE)	There are currently (January 2015) 2 pond retrofits in the design and permitting stage.	See 2014–2015 Programmatic Milestones for additional information.
BMPs implemented through P3 partnership treating 1,000 acres	DER (Now DoE)	The agreement for the Clean Water Partnership (formerly known as the P3 Program) will be formally signed in the first quarter of 2015.	See 2014–2015 Programmatic Milestones for additional information.
BMPs implemented through incentives treating 50 acres	DER (Now DoE)	In 2014, there were 79 Rain Check Rebate applications, with 52 approved, 12 denied, and 15 being processed as of the beginning of January 2015.	See 2014–2015 Programmatic Milestones for additional information.
Street Sweeping and Drain Inlet Cleaning	DPW&T	Between January 2014 and June 2014, 502.66 curb miles were sweep.	See 2014 Annual NPDES Report for additional information.
<p>DPW&T will continue reducing the existing untreated impervious surfaces through the Green Complete Streets Program Initiative. The program will include BMPs such as water quality treatment facilities or reducing impervious surfaces among other sustainable efforts to comply with MDE ESD to the MEP.</p> <p>There are ten projects currently in different phases.</p> <p>Ager Road 100% Design Phase Harry S Truman 60% Planning Phase Swan Road 30% Design Phase Edmonston Road 20% Planning Phase Paint Branch Pkwy 10% Planning Feasibility Phase Addison Road 80% Planning Contee Road 75% Design Phase Virginia Manor 40% Construction Phase Hill Road 90% Planning Phase Auth Road 95% Planning Phase</p>	DPW&T	<p>Progress Updates:</p> <p>Harry S Truman 70% Planning Phase Swan Road 90% Design Phase Edmonston Road 10% Design Phase Paint Branch Pkwy 50% Planning Feasibility Phase Race Track Road 20% Feasibility Planning Contee Road 90% Design Phase Virginia Manor 100% Construction Phase</p>	See 2014–2015 Programmatic Milestones for additional information.

Municipal Wastewater Treatment Plants & Onsite Wastewater (Septic) Systems

Action	Lead Agency	Progress	Notes
Municipal Wastewater Treatment Plants			
Western Branch ENR upgrade scheduled to be completed by 2016.	WSSC	The Western Branch ENR upgrade by the end of 2016 is on schedule.	See 2014–2015 Programmatic Milestones for additional information.
Onsite Wastewater (Septic) Systems			
Install 24 BAT septic replacements	Health Depart.	There have been nine BAT system tanks installed as of December 2014.	See 2014–2015 Programmatic Milestones for additional information.