

Caroline County 2012-2013 Milestones and Status Updates

Sector: Urban Nonpoint Source

Milestone:

Plan, design and implement 4 stormwater BMP retrofit projects on publically-owned, high-intensity impervious urban land in towns of Denton and Greensboro.

Status:

- 3 BMP retrofit projects in Greensboro funded by FY12 319 grant. Cooperative project between County and Town. Projects at Town hall parking lot, Town DPW garage and Town library. Planning, design complete. Construction bid process starts May 1 2014. Construction to be complete by June 30 2014. Using projects to train Town DPW staff in installation and maintenance of retrofit stormwater BMPs (construction of bio-retention areas, grass swales, removal of impervious pavement).

Milestone:

Plan, design and implement stormwater BMP retrofit on the County's Department of Public Works property on Wilmuth Street.

Status:

- 2 BMP retrofit projects at large County DPW facility funded by FY11 319 grant. Project Planned, designed and constructed 2 large bio-retention areas. Project completed in 2012.
- 2nd BMP retrofit project at same County DPW facility in Denton funded by FY13 319 grant. Removal of impervious pavement, installation of additional bio-retention and grass swales will result in treatment of approx. 100% of stormwater on-site.

Milestone:

Review and assess all County roads for feasibility of stormwater management retrofit projects, develop priority list of projects.

Status:

- Inventory and study of unpaved roads in Upper Choptank River Watershed funded by FY12 319 grant, to be complete by June 30 2014.
- GIS assessment will enable identification of priority areas for urban SWM BMP installation and retrofit projects.

Milestone:

Plan, design and implement stormwater BMPs on unpaved County roads.

Status:

- To be started after completion of unpaved roads study. Applying for TIGER funding in FY15 for engineering and design of priority projects identified in study.

Milestone:

Identify additional publically-owned buildings and properties suitable for BMP demonstration/education project sites.

Status:

- Identification of over 24 publically-owned sites completed for Denton and Greensboro in County 319 Upper Choptank River Watershed Plan in 2012 (stormwater BMP retrofit projects in Greensboro referenced above are first implementation projects). Projects will be implemented on remaining sites as funding is secured.
- Porous paving demonstration project at new County Dept of Emergency Services facility. FY14 319 funding secured to install porous pavement in all paved areas of new facility as demonstration project and construct interpretive signage to educate public on effectiveness of this technique. Construction to begin summer 2014.
- Riparian tree planting projects at 9 public parks/open spaces in County. Atlantic and Coastal Bays 2010 Trust Fund grant awarded for all 9 projects, a total of 2,500 new trees. Projects to run Spring 2014 – Fall 2015.
- Planning/partnership building 2012-present with town of Marydel to identify stormwater retrofit BMP projects. Meeting with town and SHA next week to finalize grant request for streetscape/stormwater new and retrofit projects, anticipate engineering/design to start 2014. Partners include UMD Sea Grant and Eastern Shore Land Conservancy Center for Towns. Organized and convened preliminary planning meetings, identified stakeholders. Developing project concepts and prioritizing needs. Assessing available technical and funding resources and identifying resource gaps.
- Planning/partnership building 2013-present with town of Ridgely to implement large-scale BMP on joint town/county/state road intersection, with assistance from SHA and UMD Sea Grant.
- Planning/partnership building 2013-present with town of Federalsburg to identify stormwater retrofit priorities and develop long-term financing strategies. Partners include UMD Center for Environmental Finance, Eastern Shore Land Conservancy, Nanticoke Watershed Alliance, UMD Sea Grant. County

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also leading effort to develop 319(h) Watershed Plan for Caroline-Dorchester-Wicomico areas of Nanticoke Watershed.

Milestone:

Assess feasibility of initiating a bi-monthly street sweeping/storm drain cleanout program in two or more municipalities utilizing a shared street sweeper and implemented in conjunction with storm drain cleanout and maintenance program.

Status:

- County discussed this idea with Preston, Greensboro and Ridgely in 2012, all expressed interest in shared street sweeper/vacuum program. County talked with 1 potential funder (USDA), however federal budget impasse killed available grant funds for foreseeable future. Still looking for potential funding sources. Denton DPW Director helpful in providing info on costs and logistics of sharing a streetsweeper.

Milestone:

Continue to identify eligible stormwater BMPS implemented in County and municipalities prior to 2010 and submit to MDE for nutrient/sediment credits.

Status:

- No progress

Milestone:

Create a County-wide system for tracking installation and monitoring performance of urban BMPs.

Status:

- No progress

Milestone:

Identify annual funding sources to implement urban BMPs.

Status:

- County has identified federal, state and NGO annual grant programs that support urban BMP implements and since 2011 has submitted applications as project lead or partner on a regular basis to:
 - MDE 319(h) program
 - National Fish and Wildlife Foundation
 - Chesapeake Bay Trust
 - Atlantic and Coastal Bays 2010 Trust Fund
 - MDE Bay Restoration and Water Quality State Revolving Loan Funds
- Obtained 319(h) Program funding for staff watershed planner to organize and oversee planning and implementation activities in Upper Choptank watershed.

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- Submitted project concepts/funding requests to MD SHA and DNR/Coastal Bays Program for first round of projects.
- Secured funding for street/sidewalk improvements (including stormwater management retrofits) and large-scale tree planting in Marydel community park, to begin in 2014.

Milestone:

Assist municipalities, communities and Home Owners Associations with development of voluntary urban nutrient management plans for homeowners/businesses.

Status:

- No progress

Milestone:

Create inventory of potential stormwater BMP projects in County and municipalities, with priority areas/projects and preliminary design concepts.

Status:

- Coordinated methodology and assessment with Chesapeake Bay Program (CBP) to enable data input to CBP Chesapeake Bay Model as part of State Phase II WIP goal.
- Conducted fine-scale GIS assessment of urban land use in County using County-level GIS data resources. Identified and assessed Caroline County urban land use acreage, including density of development and impervious area intensity, in rural areas and incorporated towns.
- Created, organized and uploaded ~200 zipped data and shape files to MDE ftp site for inclusion with state submittal of local data to CBP Bay Model workgroup. Will continue to develop shape files of relevant county and municipal data for inclusion in Bay model (i.e., locations of stormwater management infrastructure, specific buffer types and dimensions, specific types and locations of septics, etc).
- Continuing to develop inventory of potential urban stormwater BMP projects on public land in County and municipalities.

Sector: Urban and Agricultural Nonpoint Source

Milestone:

Develop program to tie economic development/community partner opportunities for reduction projects.

Status:

- 2011-12: brought County Economic Development Corporation and Univ MD scientists together to discuss economic development partnership opportunities

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for algae-scrubber projects in County. Much enthusiasm and potential, still looking for funding. DEDC director retired end of 2013, plan to meet with new Director in 2013 to discuss potential projects.

- 2012: working with agriculture extension and health department partners to research innovative 'green' (non-electric) septic BMPs that could foster niche business opportunities. Secured 2013 NFWF grant to test first idea, two-year switchgrass-drainfield project starts Spring 2014. See below for next step.
- 2013: working with agriculture extension, health department and town of Greensboro partners on joint project to construct permanent innovative septic BMP test center at new Greensboro ENR treatment plant. Draft design completed. Center will accommodate several BMP experiments at one time and will be available to private and public to test innovative practices for reducing septic nitrogen loads. Currently seeking funding for final design.

Milestone:

Work with towns to develop resources list of contractors, potential labor pools, organizations with members willing to pitch in as volunteers, and schools willing to partner students with projects.

Status:

- No progress

Milestone:

Determine training needs for small businesses and local labor force in areas of environmental site design, best management practices (BMPs) for urban and agricultural lands, stormwater retrofit and non-structural stormwater management techniques, and maintenance of BMPs.

Status:

- Progress training county/municipal DPW crews via stormwater retrofit projects on County and Town public properties. No progress in private sector.

Milestone:

Work with County economic development organizations and MD DBED on funding opportunities for demonstration projects/training workshops.

Status:

- No progress

Sector: Septics

Milestone:

**Upgrade 44 (22 in 2012, 22 in 2013) conventional septic systems to BAT systems.
(Implementation Milestone)**

Status:

- Complete

Milestone:

Assess feasibility of establishing septic districts to manage regular inspection and pumpout program of septic systems. Explore potential of funding through Bay Restoration Fund (BRF).

Status:

- No progress

Milestone:

**Apply to State/MDE for BRF funding of septic inspections/pumpouts
(comparison of cost per lb of TN reduced – BAT upgrade vs pumpout)**

Status:

- No progress

Milestone:

Determine existing capacity of local septage inspection/hauling companies, receiving facilities, and management/oversight entities. Study feasibility of expanding local capacity (including County department) to serve program.

Status:

- No progress

Milestone:

Delineate districts to encompass all on-site septic systems in County. Critical Area to serve as District 1 (priority). Remaining districts to follow election district boundaries?

Status:

- No progress

Milestone:

Determine feasible rotating schedule of inspections/pump outs for districts (e.g., 2 yrs per district).

Status:

- No progress

Milestone:

Establish system for evaluating and addressing clusters of failing septic systems within districts (i.e., what is feasibility of implementing a shared or community system in areas of multiple, failing or non-conforming systems).

Status:

- No progress

Milestone:

Assess density and condition of septic systems located adjacent to municipal sewer service areas for feasibility of connecting failing/non-conforming properties to municipal WWTPs.

Status:

- In 2012, 25 properties identified with failing or non-conforming systems and were designated a sewer service area in County Comprehensive Water and Sewerage Plan. Property owners currently working with County and Environmental Health Department to complete Bay Restoration Fund grant application process. Septics will be decommissioned and properties will be connected to new Greensboro ENR treatment plant when construction is complete, late 2015/early 2016.

Milestone:

Provide assistance in finding technical and funding resources for study and implementation of wastewater treatment solutions for North County towns [on septic systems] (Goldsboro, Henderson, Marydel and Templeville).

Status:

- Continuing to assist with funding efforts to facilitate connection of 150 failing septic systems located in around Goldsboro to new Greensboro ENR WWTP. Assisting Goldsboro and Dept of Environmental Health with coordination of application process to obtain grant funding assistance for connection costs to property owners.
- Assisted with public outreach meeting and mailing program for over 100 property owners; to date 70 property owners have completed funding applications. The two-year process will continue into 2015.