

The Maryland Green Registry promotes and recognizes sustainable practices at organizations of all types and sizes. Members agree to share at least five environmental practices and one measurable result while striving to continually improve their environmental performance.

Town of Snow Hill

103 Bank Street Snow Hill, MD 21863 410-632-2080 www.snowhillmd.com Municipal Government Member since July 2014

Management and Leadership

Environmental Policy Statement

Our mission is to protect our environmental health, build a strong local economy, and foster a socially responsible citizenry by collaborating with residents, schools, businesses, nonprofits, and municipal government to implement the Green Team Action Plan.

✓ Environmental Team

The Snow Hill Green Team meets monthly or as needed to implement action items within our community. Representatives on the team include a member of the Chamber of Commerce, four town residents, a representative of the Worcester County Health Department and six town staff.

☑ Environmentally Preferable Products and Services

The Town of Snow Hill offers a town wide recycling program that recycles cardboard, paper, metal, and plastic. The Town includes articles on recycling in its newsletter and produces a recycling pamphlet for new residents. In addition, the Public Works Department has a cardboard recycling location for downtown businesses next to the Old Snow Hill Fire House within a fenced area. This allows business owners to breakdown and stack cardboard for pick-up on recycle day. The town has a recycle trailer that normally sits next to Food Rite on Market Street, however this is in process of being re-located. Residents can still place items at curb on Thursday for pick-up or may drop at transfer station off of Timmons Street which is easily accessible.

Environmental Restoration or Community Environmental Projects

On April 26, 2012 the Town of Snow Hill worked jointly with the Lower Shore Land Trust to conduct a rain barrel workshop. The workshop included a slide show which talked about ways to conserve water to help improve the health of the Chesapeake Bay. Educators from Environmental Concern also discussed runoff and discussed simple techniques to reduce runoff and water pollution. Both residents and businesses were invited to attend. For the \$15.00 admittance fee the businesses received a ready-made rain barrel that fit nicely with Snow Hill's historic charm and for the residents they were supplied with plastic barrels to repurpose as rain barrels. The barrels were purchased with grant funds obtained by the Lower Shore Land Trust from the Chesapeake Bay Trust. The town hopes to conduct another workshop within the next two years.

Waste

✓ Recycling

The Town of Snow Hill adopted a recycling program on June 9, 2012 which is part of the Solid Waste Chapter of the town code. Town Hall, Public Works and the Old Firehouse have receptacles for paper, plastic, glass and cardboard. Public Works collects recyclables at these sites on Wednesdays and combines it with the town-wide recycling.

Energy

☑ Energy Efficiency

The Town of Snow Hill received an energy audit in February 2011 by Khepra Energy Group through the Maryland Energy Administration's (MEA) EmPOWER Energy Efficiency and Conservation Block Grant program. The field audit showed preliminary energy savings and financial analysis of a number of energy efficiency improvements. As a result of this audit, the town was awarded an Efficiency and Conservation Block Grant block grant in 2010 to install 11 storm windows at the old firehouse, retrofit the firehouse lighting fixtures with new ballasts, lamps, and quards, and recycle the items removed.

In 2013, the Town of Snow Hill signed up to be a charter participant in the ShorePower Project: Green Energy for Maryland's Eastern Shore. The ShorePower Project initiative is led by the Town Creek Foundation and Washington College Center for Environment and Society. It provides funding to examine energy use and reduce energy expenditures as well as greenhouse gas emissions. Participants in

the project receive energy baselines, reports, and greenhouse gas emission analysis.

ShorePower staff calculated the 2011 greenhouse gas emissions for the Town of Snow Hill by using the EPA's Local Greenhouse Gas Inventory Tool (LGGIT) for Government Operations. LGGIT is an Excel-based tool designed specifically to calculate Scope 1, Scope 2, and Scope 3 emissions for local government operations. The emissions sources included in each scope are as follows:

Scope 1: Direct Emissions

Stationary combustion of fossil fuels (coal, propane, heating oil, natural gas, etc)

Mobile combustion of fossil fuels (fleet fuel usage)

Wastewater treatment

Scope 2: Indirect Emissions

Purchased electricity

Scope 3: Other Emissions)

Waste and recycling

*Employee Commute

*Water Use

*Agriculture & Land Management

*Urban Forestry

* We will include these Scope 3 emissions in an updated version of this report. Scope 3 emissions generally make up a very small amount of overall emissions so anticipate a very small impact on the overall findings.

In determining how to organize the data, we used account descriptions on invoices as well as internal accounting information from the Town of Snow Hill. The departments we identified are:

- Purnell Museum: the museum itself
- Administration: Town Hall and the farmers market
- Public Safety: all fire and police structures
- Train Station: the Belt Street station
- Byrd Park: Concessions and lighting at Byrd Park
- Parks: All other parks accounts
- Water: accounts associated with water infrastructure
- Sewer: accounts associated with wastewater treatment and public works
- Streetlights: non-park lights

Summary:

The emissions summary report indicates that wastewater treatment is the largest overall emissions source accounting for 65% of town emissions. The Sewer department (which includes wastewater and public works) is responsible for the most stationary and electric emissions and Public Safety accounts for the most mobile emissions. We will use this information as a baseline moving forward and track changes in emissions as they come. A more detailed emissions breakdown as well as a regional emissions report will be posted at www.shorepowerproject.com.

For more information on the findings of this greenhouse gas report please contact Mary Yates at myates2@washcoll.edu

Water

☑ Stormwater Management and Site Design

Through funding from the Chesapeake Bay Trust and with the assistance of the Lower Shore Land Trust and the help of a Master Gardner, Snow Hill installed a rain garden at Sturgis Park. The rain garden layout covers approximately 400 sq. ft. and required 150 native perennials which were planted by three Public Works staff, three Town Hall staff, Krista Hozyash of LSLT, and eight citizen volunteers on September 14, 2012.

Snow Hill has also been actively involved in the stormwater enhancements at Byrd Park. These enhancements effectively link the built environment to the natural landscape along the Pocomoke River, eliminate the need for a centralized detention pond for control of storm events and meet or exceed the minimum stormwater sizing requirements and is a unique retrofit solution for existing stormwater outlets. In addition, the project shows effective use of better site design, natural resource protection and other nonstructural practices. The site uses rooftop and non-rooftop disconnects from the Concession Stand/Restroom facility allowing sheet flow across the grass to the submerged gravel wetlands. This retrofit project has truly beautified and enhanced the experience of visitors to Bryd Park.

Byrd Park is built on top of an old landfill and has a maximum elevation of 5 feet above the water surface of the Pocomoke River, therefore customary retention and detention features are limited. The park surface is flat with no more than a .5% slope. In March 2011, a site visit determined that the use of rooftop and non-rooftop disconnects with the submerged gravel wetlands would resolve a majority of standing water issues. The town hired Davis, Bowen, and

Friedel for \$4,500.00 to prepare submerged gravel wetland construction drawings to control stormwater around the concession stand/bathroom facility to improve drainage on the site. In May 2011, the town bid out the two submerged gravel wetlands, however funds through Program Open Space of approximately \$43,000.00 were not sufficient to construct both structures. The town proceeded with installation of Wetland 'A' which adjoins the concession stand/bathroom facility. This was the first submerged gravel wetland constructed in Worcester County and also believed to be the first on the Eastern Shore of Maryland. Wetland 'A' encompasses approximately 1,300 sq. ft. and drains 1.75 acres. The second submerged gravel wetland was achieved through Chesapeake Bay Trust funds totalling \$25,000 and covers approximately 1,200 sq. ft. and drains 2.75 acres. The Town has also installed educational signage to educate the public about the wetlands as the park is used by many residents and visitors for the Worcester County Fair and other events. The estimated pollutant removal efficiency of Wetland 'B' is 60% for total phosphorous, 20% total nitrogen, 80% for suspended solids, 50% for heavy metals, and 70% for pathogens. Plants installed in the wetlands include Red Chokeberry, Tussock Sedge, Blue Flag, Iris Versicolor, Juniperus horizontalis, Panicum virgatum, Rudbeckia hirta, and Spartina alternifolia.

Obviously one of the major challenges in constructing the submerged gravel wetlands was the high water table, therefore around the clock dewatering was necessary and a factor with regard to cost of the BMP. The other major challenge was the fact that the site was an old landfill, so any digging activity is of concern. The BMP's chosen work well for the low relief of the site and the submerged gravel wetland receives the overland stormwater runoff and subsurface flow is distributed to the bottom of the Submerged Gravel Wetland with the aid of perforated underdrains, and then rises to the surface allowing the water to pond within the submerged gravel wetland.



