

**Canaan Valley Institute (CVI) and Frederick County to
Begin Septic Upgrade Project:
Maryland Bay Restoration Fund
Offers Funding for Wastewater Initiatives**

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In 2004, the Frederick County Division of Public Works, Watershed Management Section, completed a Watershed Restoration Action Strategy plan (WRAS) for the Lower Monocacy Watershed. This effort was made possible through a partnership with the Maryland Department of Natural Resources and representatives of various local, state, and regional government agencies, as well as non-governmental organizations. The WRAS identified failing septic systems and septic systems located on small lots as probable sources of nutrient impairment in the watershed, especially in the Upper Bennett Creek and Upper Fahrney Branch subwatersheds, and the Buckeystown area, where drainage is direct to the main stem of the Monocacy. During the development of the Upper Monocacy WRAS in 2005, it was noted that the Lewistown area is also affected by similar On-Site Sewage Disposal System (OSDS) problems. The Upper and Lower Monocacy River watersheds are listed on Maryland's 303(d) list of impaired waters for biological, sediment, nutrient, and bacterial impairments.

As part of an ongoing effort by the WRAS partners to restore the Monocacy Watershed, the Frederick County Health Department, in partnership with Canaan Valley Institute, has been awarded over \$700,000 through the Maryland Bay Restoration Fund (BRF) in order to address nutrient impacts by failing and underperforming OSDS in the Monocacy Watershed and in Frederick County's proposed source water protection areas.

Signed into law in May 2004, the Bay Restoration Fund is Maryland's newest tool for reducing nitrogen and phosphorus loading from wastewater treatment plants (WWTP) and OSDS. The OSDS portion of the fund is expected to generate \$12.6 million annually, of which sixty percent, or roughly \$7.5 million, will be used for OSDS upgrades to the best available technology for nitrogen reduction, with the remaining forty percent dedicated to the state's cover crop program.

Throughout Frederick County, an estimated 65 OSDS will be upgraded over a two-year period. These upgrades will reduce the concentration of nitrogen in the OSDS effluent by 50% or more. CVI will work with the Health Department to identify and prioritize potential sites, coordinate with homeowners, select appropriate technologies, oversee installation, and establish a management framework.

The first phase of the project—site identification—will begin in early 2007. Homeowner education activities will be directed toward the WRAS-identified communities and to residents living within proposed source water protection areas, in order to generate

applications from these priority locations. This process includes mailings, meetings with community leaders, community forums, and homeowner visits, as appropriate and necessary. While these site identification activities will primarily be directed toward these targeted communities, applications will be accepted for any site within the boundaries of Frederick County.

In order to prioritize applicant sites, they will be scored based upon a variety of factors, including

- sites with failing systems,
- sites concentrated on lots smaller than one acre,
- proximity to surface water (lakes and rivers/streams),
- sites located within proposed source water protection areas,
- sites that are appropriate for the development of cluster systems,
- sites in communities identified by the Upper and Lower Monocacy WRAS reports as probable contributors to nitrogen impairments due to OSDS issues,
- sites with restrictive soil conditions (high water table, low depth to bedrock, underlain by karst geology), and
- sites located in subwatersheds known to contain native brook trout populations.

Once prioritized, site conditions will be verified, and an appropriate technology will be selected in consultation with the homeowner.

For more information about the Frederick County OSDS upgrades project, email Jared Bartley at jared.bartley@canaanvi.org.