Recycling and Public Works

Cecil County Department of Public Works is composed of four operational branches. The four branches are the Roads, Water and Wastewater Management, Weed Division, and Solid Waste Management Divisions. The Roads Division is the largest operational division of Cecil County Public Works. The 49 member crew provides upkeep for roads, bridges, and road signs. The Roads Maintenance Division maintains county streets and drainage structures and is responsible for emergency response actions daily. The Cecil County Water and Wastewater Division is responsible for upkeep and maintenance of public water facilities and sewage treatment plants. Cecil County has four public water supply facilities and five public wastewater/sanitary sewer treatment plants. The Weed Control Division is the smallest of the four divisions of Cecil County Public Works, and is responsible for the inspection and control of noxious weeds.

The Solid Waste Management Division in Cecil County has two satellite solid waste transfer stations and a central landfill facility. Maryland state law requires that each county up to 150,000 in population must recycle at least 15 percent of its solid waste stream. Cecil County is currently recycling 40 percent of its waste stream. As of December 1, 2006, Cecil County began Single Stream Recycling. Single Stream Recycling allows recyclables, including paper and cardboard, to be mixed into one container. All three facilities accept single stream recycling. Recyclables are shipped to Recycle America's plant in Elkridge, Maryland, where the recyclables are sorted. In May 2008, a new Homeowner's Convenience Drop-off Center is expected to open at the Central Landfill.

On April 22, 2006 the Cecil County Landfill began electronics recycling. Computers, DVD players, VCRs, printers, keyboards, and TV's under 25" are among the items that can be recycled. Electronics are picked up by Computer Donations of Baltimore, Maryland, and 100% of the donations are recycled.

Scrap metal, white goods (household appliances such as refrigerators) and Freon units can be brought to the Cecil County Central Landfill free of charge. Stemmers Run Transfer station also accepts these items on a biweekly basis. Hazardous waste can be taken to the County Landfill free of charge on designated Hazardous Waste Days, which occur once in the fall and once in the spring. **Unused medications**, paint, and cleaners are common household hazardous wastes, and these products should not be thrown away or put down the drain. Oil, antifreeze, fluorescent bulbs, and lead acid batteries can be taken to any of the three facilities Monday through Saturday during regular operating hours.

Yard waste is accepted at the Central Landfill. Yard waste is vegetative matter such as leaves, grass, brush, tree trimmings, limbs not exceeding 3" in diameter and 6' in length, Christmas trees, and certain garden and orchard materials. Contact the Central Landfill to be sure materials to be recycled meet the rules and regulations for recycling.

Recyclables Include the Following:

- Cans: all aluminum, steel, "tin", or bimetal beverage and food cans that are rinsed
- Paper: includes but is not limited to cereal boxes, frozen food boxes, shredded paper, mail, catalogs, telephone books, and magazines
- Narrow Neck Plastic Bottles and Food Containers: Look for the number inside the recycling symbol on the bottom of bottles and containers
- Glass: Rinsed unbroken glass bottles and food containers

Number and Name	Examples
1 Polyethylene Terephthalate	Water, soda, and sports drink bottles
2 High Density Polyethylene	Shampoo, dish and laundry detergent bottles
3 Polyvinyl Chloride	Milk, water jugs and soft drink bottles
4 Low Density Polyethylene	Squeezable honey and mustard bottles
5 Polypropylene	Ketchup and Medicine bottles
6 Polystyrene	Transparent aspirin and medicine bottles
7 Other Plastics	3-5 gallon reusable water and juice bottles

Where To Get Help **Public Works information**

- Cecil County Department of Public Works; **410-996-5259**; **http://www.ccgov.org/dept_works/index.cfm**
- Roads Division; **410-996-6270**; **http://www.ccgov.org/dept_works/roadsdiv.cfm**
- Water and Wastewater Division; **410-996-5143**; **http://www.ccgov.org/dept_works/WaterDiv.cfm**
- Solid Waste Management Division; **410-996-6275**; **http://www.ccgov.org/dept_works/solidwastediv.cfm**
- Weed Control Division; **410-287-4638**; **http://www.ccgov.org/dept_works/roadsdiv.cfm**

Easy Ways to Save Water

Although Cecil County is generally blessed with bountiful rainfall, it has also known severe drought periods that have had a serious impact on water supplies, both from private wells and public water systems. As the population in our county and region grows, more people vie for the same sources of water, and water conservation is evermore critical. By adopting a few simple water-saving habits, you can help extend precious water supplies and alleviate excessive burdens on septic systems and public sewer systems.

To conserve water, repair all leaks and drips around the house. A single running toilet can waste 200 gallons of water per day. Make sure there are no dripping faucets, running toilets, leaking pipes, or other unnecessary water use. Turn off the faucet while you brush your teeth, shave, lather up, etc. Installing low-flow fixtures on showerheads, sinks, and toilets will also minimize water use.

Be savvy about lawn and garden care. Adding organic matter to the soil increases water absorption, and mulching bare areas conserves moisture. Water deeply, thoroughly, and infrequently—early morning is the best time to water. Installation of drip irrigation and/or timers also reduces water use. Use nozzles on outside hoses, and wash cars with a bucket of water, using the hose only to rinse off. When washing dishes or doing laundry, maximize your water usage by running only full loads. Make your next washing machine a front loading model (they require less water).

Where To Get Help **for water conservation information**

- Maryland Cooperative Extension; **http://extension.umd.edu/publications/Category.cfm?ID=L**
- Conserve Water; **http://www.mda.state.md.us/pdf/tip5.pdf**
- USDA Natural Resources Conservation Service, Water Conservation; **410-398-4411 ext. 3**; **http://www.nrcs.usda.gov/feature/backyard/watercon.html**
- Water Conservation Tips; **http://www.monolake.org/socalwater/wctips.htm**
- MDE Water Conservation; **http://www.mde.state.md.us/Programs/WaterPrograms/Water_Conservation/index.asp**
- Listed Local Water Restrictions in Times of Drought; **http://www.mde.state.md.us/Programs/WaterPrograms/Water_Conservation/Current_Conditions/Local_Restrictions.asp**

Living on Well Water

If you have a home well, you alone are responsible for maintaining the safety and quality of your drinking water supply. When your well system is suitably located, correctly installed, properly maintained, and regularly tested, you should have few problems with water quality.

Residential wells in subsurface aquifers, depending on the depth of the well, are replenished by rainwater that falls anywhere from several feet away to miles away from the location of the well. For this reason, the way you and your neighbors use the landscape can be an important factor in the quality of your water supply. Be alert to possible sources of well water contamination, such as runoff from large paved areas, faulty septic systems, leaking underground fuel tanks, landfills, industrial spills or discharges, and inappropriate use of animal wastes, fertilizers, and pesticides.

Tips for Safeguarding Well Water

- Detecting groundwater contamination requires regular testing. Test your water supply once a year for bacteria and nitrates. Consider seasonal testing if any sample shows elevated levels of contaminants. Prolonged periods of heavy rain can flush contaminants into groundwater supplies.

- At the very least, test your water any time you notice unusual odors, colors, or cloudiness or if you note an interrupted supply, such as pumping air or sediment.

Where To Get Help for well water information

- Conserve Water; **http://www.mda.state.md.us/pdf/tip5.pdf**
- For concerns or questions involving well water quality, or if you experience problems with your well contact the Cecil County Health Department Environmental Health Services at **410-996-5160**
- Well Maintenance Tips; **http://www.epa.state.il.us/well-water/well-maintenance-tips.html**
- Wells, Well Water, and Water Contamination; **http://extension.umd.edu/publications/PDFs/HW3.pdf**
- Wellowner; **http://extension.umd.edu/publications/PDFs/HW3.pdf**

Taking Care of Your Septic (Wastewater) System

In areas without public sewer service, household wastewater (from the bathroom, kitchen, and laundry) is treated in individual septic systems. A septic system has two major components: a septic tank and a drain field. Wastewater sewage flows from the house to the septic tank, which retains wastewater long enough for the heavy solids to settle to the bottom and then releases the untreated wastewater into the drain field. A solid pipe leads from the septic tank to a distribution box, where the wastewater is channeled to the drain field—one or more perforated pipes set in trenches of gravel. Here the water slowly infiltrates into the underlying soil. Dissolved or suspended wastes and bacteria in the water are trapped or absorbed by soil particles or decomposed by microorganisms.

These microorganisms perform the only treatment of the water before it percolates through the soil to the groundwater table. Under normal conditions, the microorganisms perform well, unless very toxic materials overwhelm the septic system. Microorganism performance can also be diminished if the drain field becomes saturated with stormwater.

A Best Available Technology (BAT) for septic systems is an advanced onsite sewage treatment system that will greatly reduce the amount of nitrogen emitted from a septic system. BAT units combine settling of solids, extended aeration, and recirculation to produce a greatly reduced amount of nitrogen in the effluent. The average user of a septic system produces 3.8 pounds of nitrogen per year that eventually ends up in surface waters. The anticipated load from septic systems in Maryland is estimated at 5.1 million pounds per year to the surface waters of the state.

Tips for Septic System Care

- Tanks generally need to be pumped out every two to five years, depending on use, the size of the tank and the number of people in the house. If the tank gets too full, sludge particles will flush out of the tank and clog the drain lines. The EPA recommends tanks be pumped before sludge and scum accumulations exceed 30% of the tank volume.

- Don't add "starter enzymes" or yeast to your system. Additives have not been scientifically proven to improve the performance of your system.

- Do not pour fats and oils, chlorine bleach, solvents, chemicals, pesticides, paint thinner, or auto products down the drain. These substances can kill the bacteria that make the system function.

- Do not put trash in the toilet such as paper towels, tissues, cigarette butts, disposable diapers, sanitary napkins, tampons or condoms. These items do not break down quickly and can fill the septic tank.

- Direct downspout discharges and runoff away from the septic field to avoid saturating the drain field area with excess water.

- Do not overload the system—this is the primary cause of system failures. Early morning and bedtime are peak use times in the bathroom. Run dishwashers and washing machines at other times of the day. Don't do all the family laundry in one day.

- Dense grass cover and other shallow-rooted plants are beneficial over a drain field. However, do not plant trees near a drain field because large plant roots can clog or break the pipes.

- Avoid compacting the soil over a drain field to ensure proper percolation of effluent.

- Using a garbage disposal can double the amount of solids in the tank. Instead, consider composting organic matter. See the "Composting" section for tips.

- Look into getting a BAT unit for your septic system. BAT systems are more expensive than a regular septic system but are now made more affordable to the property owner through the use of grant money collected through the Bay Restoration Fund. To find out more, contact John Boris, Project Manager at the Maryland Department of the Environment (MDE), at 410-537-3678 or by email at jboris@mde.state.md.us.

Where To Get Help **for septic system information**

- If you have a septic system problem, contact the Cecil County Health Department Environmental Heath Services at **410-996-5160**
- For Frequently Asked Questions; **http://www.cecilcountyhealth.org/ccdhSepticFaqs.htm**
- A Guide to Maintenance; **http://www.epa.gov/owm/septic/pubs/homeowner_guide_long.pdf**
- MDE BAT Grant Money Application; **http://www.mde.state.md.us/Water/CBWRF/index.asp**

Energy Conservation

Global warming and climate change have received an increasing amount of media coverage over the past several years, and energy conservation has become a hot topic of discussion. Over 50 percent of the United States' electricity is generated from coal. The U.S. Department of Energy, Department of Fossil Energy is researching ways to virtually eliminate sulfur, nitrogen, and mercury released during the burning of fossils fuels, ways to capture greenhouse gases, and ways to increase the efficiency of coal fueled power plants.

The use of oil and natural gas accounts for 35 percent of the energy consumed in the United States. It is likely that the use of oil, coal, and natural gas will continue to increase even with new renewable and nuclear technologies. The DOE is working to improve its many renewable energy sources. Renewable energy sources include wind, solar, geothermal, hydrogen, and biomass energies. Hydroelectric power facilities generate enough energy to supply 28 million households with electricity, which is equivalent to 500 million barrels of oil. Cecil County is home to the nation's largest privately owned hydroelectric power plant, the Conowingo Dam. The Conowingo Dam and Hydroelectric Plant is located on the Susquehanna River, bordering Cecil and Harford Counties.

Image Credit: Conowingo Dam
http://www.portdeposit.org/gallery/Scenic/Conowingo_Dam_4_9

As population and development demands increase in the United States the demand for energy increases. It is important to begin conserving energy on an individual scale. The following is a list of simple steps homeowners can take to reduce energy demand and save money.

Tips for Conserving Energy

- Turn off the lights when leaving the room.
- Keep doors, windows, and drapes closed when running the air conditioning and the drapes open when running the heat.
- If your air conditioning unit is old, consider replacing it with a new energy efficient model that could save up to 50 percent of your electricity bill.
- Air dry dishes instead of using the drying cycle on your dishwasher.
- Clean the lint filter in the clothes dryer after every load to improve circulation.
- Consider buying a laptop for your next computer upgrade, laptops use less energy than desktop computers.
- Plug appliances, like TVs and DVD players, into power strips. When the appliance is not in use turn the power strip off. Appliances still use energy when plugged in and not in use. Electricity used by appliances accounts for 20 percent of a typical American's electric bill.
- By cutting your programmable thermostat from 72 to 68 degrees for 8 hours a day (when at work), your heating bill can be cut up to 10 percent.
- Lighting accounts for 15 percent of household electricity use. Fluorescent bulbs reduce energy use by 75 percent and last ten times longer when compared to incandescent bulbs.

Where To Get Help **for energy conservation information**

- United States Department of Energy; **http://www.energy.gov**
- 53 Ways to Conserve Energy; **http://www.reupower.com/energysvc/53ways.html**
- 85 Ways to Save Money and Energy; **http://www.pepco.com/_res/documents/Pepco_85_ways_Br.pdf**
- Maryland Energy Administration; **http://www.energy.state.md.us/**
- For a guided tour by appointment or more information about the Conowingo Dam and Hydroelectric Plant call **410-457-5011**