

Environmental Stewardship in Carroll County



2015

Carroll County has long been a leader in the State with program, policies, and regulations that demonstrate our dedication and commitment to environmental stewardship.

Commissioners' Environmental Principles

In October 2011, the Board of County Commissioners adopted a set of environmental principles to emphasize the County's commitment to environmental stewardship. The Board's support for clean air, land, and water was detailed in its vision. (See sidebar)

Carroll County Master Plan Goals

Four of the 14 goals of the adopted Master Plan for Carroll County relate to the environment. The Master Plan seeks a holistic approach to protection of environmental resources by incorporating stewardship into other activities and policies. (See sidebar)

Land Conservation & Preservation

Carroll County has a rich tradition of agriculture that continues to be strong today and continues to support agriculture as the county's number one industry. The countywide desire to preserve the farming way of life and support agricultural industries has resulted in tremendous rates of participation in one of the most successful agricultural land preservation programs in the country, **ranking 4th in the nation with the number of acres preserved through conservation easements¹**. The preservation of the agricultural industry in the county is strengthened through conservation of intermingled lands steeped in natural resources. Carroll County land owners have voluntarily placed easements on over 65,000 acres of land, limiting their development rights and thus ensuring that the land will be farmed for generations to come. Each acre of land under an easement also helps to preserve the rural character of the county which is so often imperiled by increased development

January 21, 2015

Commissioners' Environmental Principles

1. Maintain and improve environmental quality and encourage economic prosperity while preserving the county's rural character.
2. Promote land use, planning, and development concepts and practices that support citizens' health, safety, well-being, individual rights and the economic viability of Carroll County.
3. Maintain safe and adequate drinking water and other water supplies including efforts to protect and restore the Chesapeake Bay.
4. Strive to protect our natural resources for future generations.

Environmental Goals in Master Plan*

Goal 1 ♦ Pursue policies and capital improvement expenditures that facilitate growth in the designated growth areas, thereby protecting and conserving agricultural and environmental resource areas, preserving open space, and providing public facilities and services efficiently and cost effectively.

Goal 2 ♦ Preserve 100,000 acres of tillable agricultural land for the production of agricultural products and promotion of related agribusiness.

Goal 3 ♦ Protect, maintain, and restore, where practical, the environmental resources and natural ecosystems in the county by promoting land use practices that are in balance with, and minimize the effects on, the natural environment.

Goal 8 ♦ Promote development design that is in harmony with the surrounding built and natural environments, encourages community interaction, and in rural areas, preserves the county's rural character.

**includes Goals, 1, 2, 3, & 8 out of 14 goals.*



and the diminished ability of farmers to continue farming as a result of development's side effects. Carroll has the largest percentage of acres preserved in the State, at roughly 20 percent¹.

Agricultural Land Preservation Program

Carroll County Agriculture Land Preservation Program 410-386-2214
<http://ccgovernment.carr.org/ccg/aqpres/> carrollaqpres@ccg.carr.org

One of Carroll's best-known success stories is its Agricultural Land Preservation Program. The community has long recognized the benefits to be reaped through ensuring the continuance of the strong agro-economy. For many decades, Boards of County Commissioners have consistently supported the County's **goal of preserving 100,000 acres of farmland**, as demonstrated through the continued funding, staff, and other resources needed. The County's diverse programs and approaches to preservation and payment options continue to ensure land is available to support a viable agricultural industry, while also promoting the county's heritage, protecting environmental resources, and maintaining the aesthetic charm and way of life so many enjoy. Preservation programs contributing to Carroll's success include:

- ♦ Maryland Agricultural Land Preservation Foundation (MALPF)
- ♦ Carroll County Agricultural Land Preservation Program
 - Water Recharge Credit
- ♦ Carroll County Critical Farms Program
- ♦ Rural Legacy Program, with two delineated Rural Legacy Areas (Little Pipe Creek and Upper Patapsco)
- ♦ Participation of Land Trusts and Conservancies, such as the Carroll County Land Trust, Maryland Environmental Trust, and The Nature Conservancy.

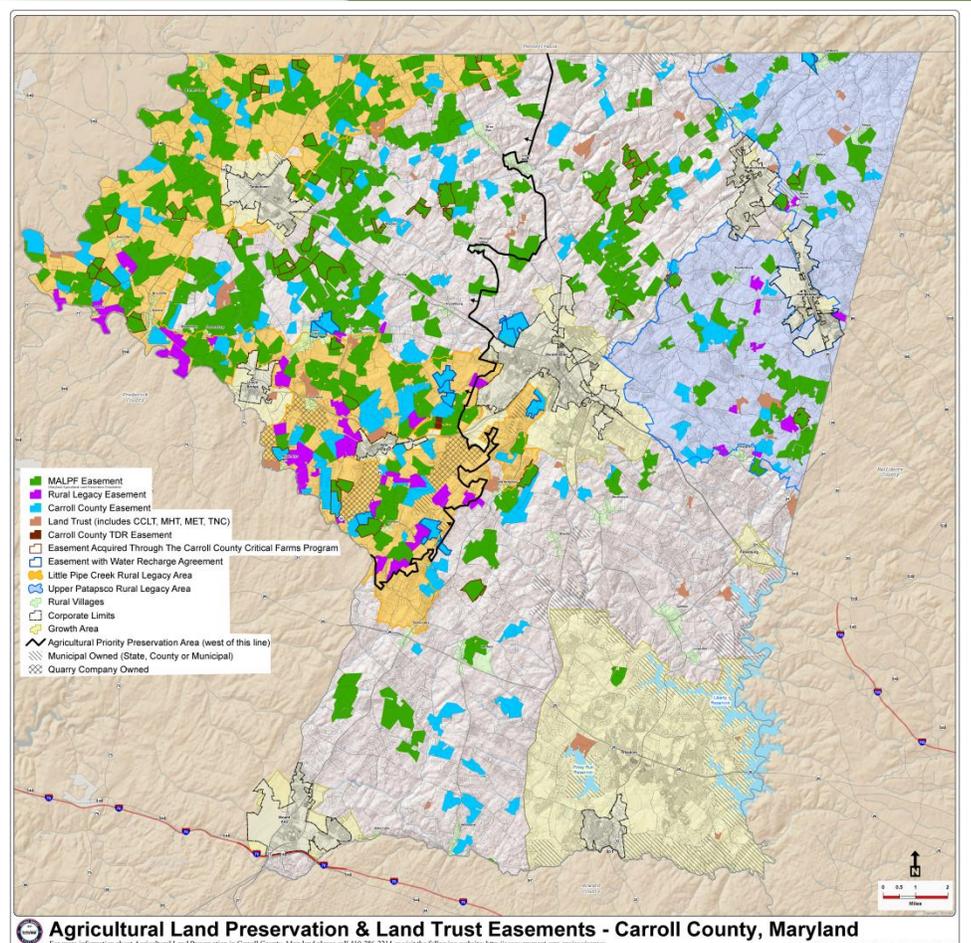
Water Recharge Credit

In Carroll County, water recharge credits have become a tool for offsetting water requirements for development and permanently protecting undeveloped land. Maryland Department of Environment (MDE) regulates the appropriation of water to landowners and municipalities based on recharge rates, or amount of rainfall that reenters the aquifer. MDE appropriations are made conservative through the consideration of drought recharge and periods of low stream flow.



From FY 1980 through FY 2014, 65,761 acres were permanently preserved through easement programs, which is over 1/5 of the total county land area.

Program	Acres Preserved	\$ Spent
MALPF	43,260	\$136,282,882
Carroll County	16,105	(County \$)
Rural Legacy	3,989	+
Land Trusts & Conservancies	2,407	\$63,603,342 (State \$)
Totals	75,761	\$199,886,224





Municipalities across the Piedmont, due to MDE requirements, only have enough recharge to develop at 1-2 units per acre, rather than the 3.5 dwelling units per acre prescribed for Priority Funding Areas. Municipalities can only claim recharge from land they own and control.

Carroll County implemented a program to offer water recharge credits, as a provision of the Agricultural Land Preservation Easements, by which groundwater recharge on farms is protected in perpetuity and then the water appropriation transferred to municipalities to develop at Smart Growth densities. These credits are included as part of the conservation easement acquired through the Agricultural Land Preservation Program. Farms suitable for water recharge credits are selected strategically for their location, geology, high recharge capacity, and current agricultural operations. As of November 2014, **Carroll has acquired recharge credits on 1,550 acres through 9 conservation easements.**

Rural Legacy Areas (RLAs)

Two locally designated Rural Legacy Areas – Little Pipe Creek and Upper Patapsco – encompass 58,526 and 39,198 acres, respectively, of land eligible for participating in this State program. Greenbelts of forests and farms around rural communities are intended to preserve their cultural heritage; to preserve critical habitat for native plant and wildlife species; to support natural resource economies such as farming, forestry, tourism and outdoor recreation; to protect riparian forests, wetlands, and greenways to buffer tributaries of the Chesapeake Bay from pollution runoff. The County contributes funds toward the purchase of RLA easements.

Agriculture Programs & Best Management Practices (BMPs)

Soil Conservation Partnership/Maryland Agricultural Water Quality Cost-Share Program (MACS)

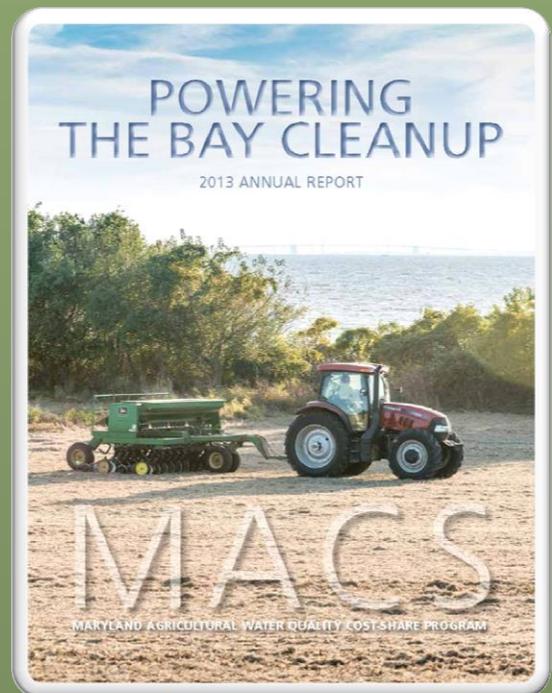
Carroll County farmers have a long, proud tradition of voluntary participation and installation of BMPs cost-shared by MACS. Even though Maryland's revised nutrient management regulations now mandate many of these BMPs, **farmers who receive cost-share grants from MACS still invest additional funds themselves** in projects to protect natural resources on their farms, adopt sustainable farm management practices, and comply with Maryland's revised nutrient management regulations.²

Nutrient Management Plans

Farmers are required to follow nutrient management plans when fertilizing crops and managing animal waste. These plans specify how much fertilizer, manure or other nutrient sources may be safely applied to crops to achieve yields and prevent excess nutrients from

January 21, 2015

*As of November 2014,
water recharge areas
were protected on 1,550
acres incorporated into
9 easements.*



All information in this section is directly from the Maryland Agricultural Water Quality Cost-Share Program, Powering the Bay Cleanup: 2013 Annual Report. Maryland Department of Agriculture.

http://mda.maryland.gov/resource_conservation/counties/MAC SAR2013.pdf



impacting waterways. These plans generally are required for all agricultural land used to produce plants, food, feed, fiber, animals, or other agricultural products. Maryland’s updated regulations now require farmers to establish setback areas next to waterways.²

Conservation Resource Enhancement Program (CREP)

CREP is a federal-state program that pays landowners to take environmentally sensitive cropland out of production for 10 to 15 years and to install conservation practices that protect water quality and provide wildlife habitat. In Fiscal Year (FY) **2013, 15 CREP projects** were completed in Carroll County with \$49,775 in cost-share grants to install stream protection measures.²

Best Management Practices (BMPs) Installed

Farmers have installed projects on their farms to control soil erosion, to reduce nutrient runoff, and to protect water quality. Many of these projects included multiple conservation practices. For FY 13, the Soil Conservation District reported **98 projects installed** by farmers in Carroll County using **\$938,021** in MACS assistance – **the highest payment and number of projects of all Maryland counties.**²

Cover Crops

Farmers who plant certain cover crops on harvested crop fields in the fall help to recycle residual plant nutrients, to protect against wind and water erosion, and to improve soil for next year’s crop. Cover crops help to prevent nitrogen and phosphorus from reaching the Bay. In **FY 13**, through participating in MACS alone, Carroll County farms planted **over 23,115 acres of cover crops.**



Land Conservation through Parks

Carroll County Recreation & Parks

<http://ccqgovernment.carr.org/ccq/recpark/>

410-386-2103

ccrec@ccq.carr.org

The significant contribution and role that parks play in the conservation of land and natural resources should not be overlooked. Carroll actively pursues and purchases land for parks and conservation of land and natural resources. These large land areas provide opportunities for eco-tourism, environmental education, water recharge and passive recreation. In addition to the conservation of biodiversity and resources, Carroll also has a long history of providing environmental education opportunities to residents, opening their first nature center in 1981 and a second in 1991. In addition, over 100,000 students have participated in Outdoor School since its inception in 1977 at a County park, a tradition that continues today for all local 6th grade students. Carroll continues to provide increased opportunities for

January 21, 2015

Classification	Acreage	Acres / 1,000 people
Local Recreation	5,916.25	35.20
Local Natural Resource	6,311.20	12.39
Totals	10,227.45	47.59



Environmental Stewardship in Carroll County

citizens to experience nature first hand through outdoor recreation with over 40 miles of hiking and water trails.

Carroll provides almost 48 acres of land per 1,000 people – with over 35 acres per 1,000 people through local recreation and over 12 acres per 1,000 people through local natural resource areas. These totals exceed the State’s recommended goal of 30 acres per 1,000 residents.³

Resource Management

Carroll County Bureau of Resource Management
<http://ccgovernment.carr.org/ccg/resmgmt/>

410-386-2210
ccplanning@ccq.carr.org

Natural Resources Easements

Acquired through Land Development

Water Resource Protection

Carroll County places high value on protecting our important water resources. Securing Water Resource Protection Easements through the development process, the land within provides a buffer to the stream system from adjacent land use activities. Stream buffers benefit streams, as well as the watershed or drainage area, by filtering runoff that could contain sediment and nutrients, moderating stream temperatures, and maintaining wildlife corridors.

There are two types of Water Resource Protection Easements – Forested and Non-Forested. Requirements for both types are almost identical except that non-forested easements require a dense and vigorous cover of non-lawn vegetation be maintained.

Floodplain Protection

Carroll County recognizes the importance of protecting floodplains and the benefit this provides to both property owners and the environment. Floodplain is preserved through a Floodplain Protection Easement, which helps to protect human life and health, minimize property damage, encourage appropriate construction practices to minimize future damage, and to protect water supply, sanitary sewer disposal and natural drainage.

Floodplains are an important asset to the community, performing vital natural functions such as:

- ◆ Temporary storage of floodwaters
- ◆ Moderation of peak flood flows
- ◆ Maintenance of water quality
- ◆ Prevention of erosion
- ◆ Provision of habitat for diverse natural wildlife populations
- ◆ Improved aesthetics



*Carroll protected
58 miles of buffered
streams.*

Easement Type	Acres Preserved	# of Easements
Water Resource Protection	1,729	484
Floodplain Protection	581	181
Forest Conservation	3,811	1,370
Totals	6,121	2,035



Through the development process, property owners provide a Floodplain Protection Easement in perpetuity to preserve the natural vegetation and to prevent alteration of floodplains and the setbacks wherever floodplains are delineated. The floodplain setback is based on the floodplain width, stream buffer, or 100 feet from the top of the stream bank on any mapped Federal Emergency Management Administration (FEMA) stream, whichever is largest.

Forest Conservation

Forest conservation easements are secured for the long-term protection for all retention, reforestation, afforestation, off-site reserve, and forest bank areas. The easement is conveyed to the County during the development process. Adequate fencing or other protective measures may be included to prevent encroachment into the area.



Carroll County Environmental Codes

Water Resource Management

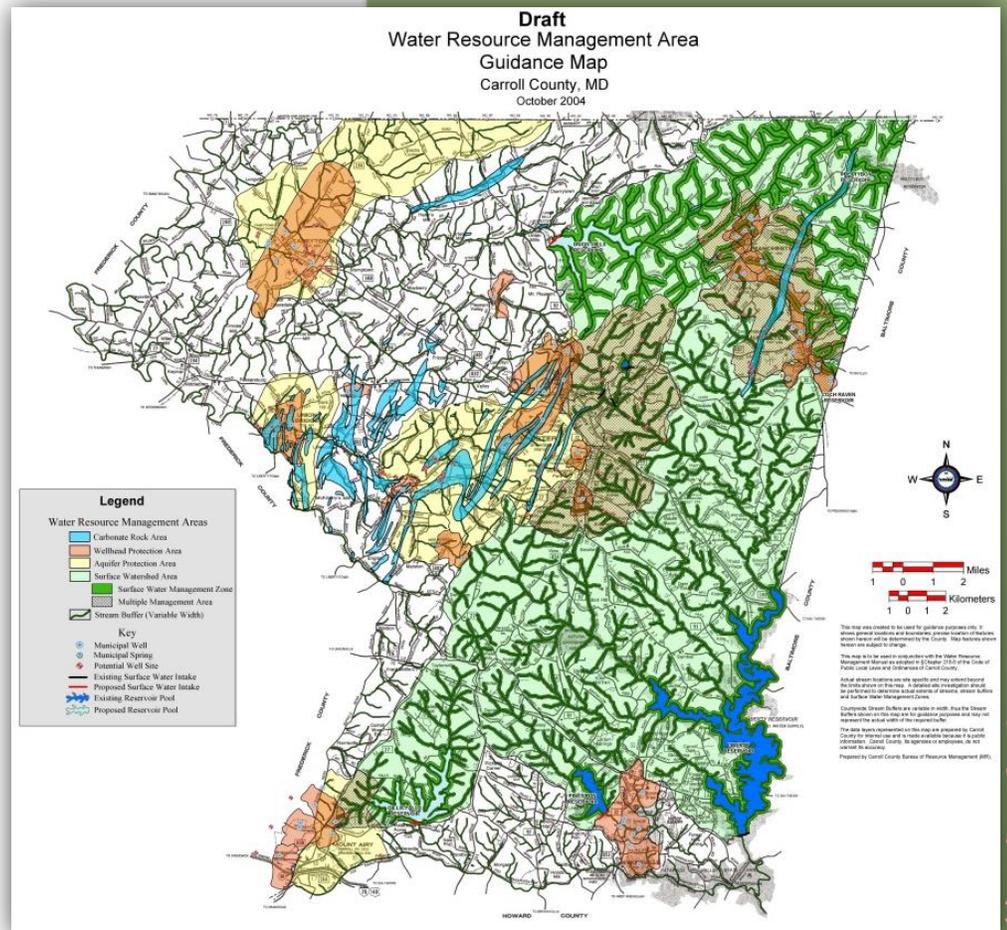
Carroll County's Water Resource Management program (Chap. 154) ensures development proceeds in a manner that will minimize adverse impacts on water supply resources. Delineated management areas include measures to protect drinking water supplies from both existing and future ground and surface water degradation sources. Five types of water resource areas have been delineated: wellhead protection for public water supply, aquifer protection, carbonate rock, surface watershed, and stream buffers.

Floodplain Management

The County created a Floodplain Management Program, adopted a Floodplain Management Chapter (Chap. 153), and approved a Floodplain Management Specialist Position in 2004. The program received FEMA approval in 2006. On October 1, 2007, the County was accepted into FEMA's Community Rating System program as a Class 8 community. This provides a 10 percent reduction on insurance premiums for holders of eligible flood policies within unincorporated areas of Carroll County.

The Carroll County Floodplain Management program requires protection of floodplains by setting minimum technical standards

January 21, 2015





for performing floodplain studies and producing consistent, accurate, current, and verifiable floodplain mapping. This mapping can be used to evaluate flood hazards, set flood insurance rate zones, and regulate new subdivision and building construction in and around floodplains. The floodplain mapping data long-term will enable prospective and existing property owners, lending institutions, and insurers to consider the risk prior to buying, building, financing, or insuring property, homes, or businesses subject to flood hazards.

FEMA is currently in the process of revising the Flood Insurance Rate Maps (FIRMs) for Carroll County. The 90-day appeal period for the revised FIRMs ended in October of 2012. The County is currently awaiting the Letter of Final Determination (LFD) from FEMA. Once this is received, the County will have 6 months to make minor adjustments to the ordinance prior to the revised FIRMs becoming effective.

Forest Conservation

The Carroll County Forest Conservation Code (Chap. 150) is intended to protect not only forests and trees in developing areas, but also any sensitive areas identified during the local planning or comprehensive land use plan adoption process. It requires that prior to the approval of any subdivision of land or development which results in the cumulative disturbance of 40,000 square feet or greater, applicants shall submit a Forest Stand Delineation (FSD) and a Forest Conservation Plan (FCP). These plans must be approved by Carroll County before development can proceed. The Carroll County Forest Conservation Technical Manual gives additional procedural information.⁴

“Carroll County’s Forest Conservation Code includes a **pioneering effort** that established the use of a *forest banking* program. Forest banking is a conservation tool that involves the relinquishment of development rights by a landowner on newly planted forest, which generates mitigation credits that can be exchanged for a payment. The payment typically comes from a developer who must replace forest that has been cleared at another location. Although the code has evolved since its first iteration, the use of forest banking as a mitigation alternative has survived because of its effectiveness... In Carroll County, 397.6 acres of forest have been created by forest conservation banks since the inception of the Maryland Forest Conservation Act in 1991. Carroll County landowners are engaged in the establishment of viable and marketable forest conservation banks.”⁵

This is an excellent example of a successful private sector venture resulting from a State-mandated, county-delegated regulation.

Landscaping

Carroll County recognizes that landscape requirements for new development effectively add intrinsic value to the landscape in many ways, including the following:

Carroll County Forest Conservation Acres Banked ⁵	
Element	Acres
Bank afforested	179.3
Bank reforested	218.3
Total bank acres	397.6
Other acreage	
On-site retention	584.1
On-site afforested	81.3
On-site reforested	139.5
Off-site retention	26.0
Off-site afforested	103.8
Off-site reforested	142.2

- ◆ The preservation and enhancement of the aesthetic value of Carroll County's landscape;
- ◆ The augmentation of a sense of community in new development by visually tying properties together;
- ◆ The creation of a sense of place by using trees and other vegetation to define space and to buffer incompatible uses;
- ◆ The moderation of the impact of wind, temperature, rainfall, frost and other climatic elements;
- ◆ The effective conservation of energy use through that moderation; and
- ◆ The enhancement of property values by providing amenities to development design.

The County's landscape requirements (Chap. 157) enhance the aesthetic and environmental setting of new residential, commercial, industrial, and institutional development in Carroll County through the establishment and ongoing maintenance of prescribed landscaping.

Grading & Sediment Control

Establishing minimum standards (Chap. 152) for the control of soil loss through erosion to minimize sediment transport through runoff is critical to preventing degradation of the integrity and health of Carroll County's stream system. Minimum standards for management practices are applied through the issuance of grading permits for land disturbance that may involve clearing, grubbing, grading, filling and the movement of soil to alter the topography and for forest harvest activities.

Stormwater Management

While Carroll County has incorporated the requirements of the State's 2007 Stormwater Act to its own stormwater management code (Chap. 151), **the requirement to use non-structural practices had already been in the County's code prior to these changes.**

The goal is to manage stormwater by using environmental site design (ESD) to the maximum extent practicable (MEP) to maintain after development, as nearly as possible, the predevelopment runoff characteristics, thus reducing stream channel erosion, pollution, siltation, sedimentation, and local flooding, and to use appropriate structural best management practices (BMPs) only when necessary. This will help restore, enhance, and maintain the chemical, physical, and biological integrity of streams, minimize damage to public and private property, reducing impacts of land development.

Urban Stormwater Mitigation

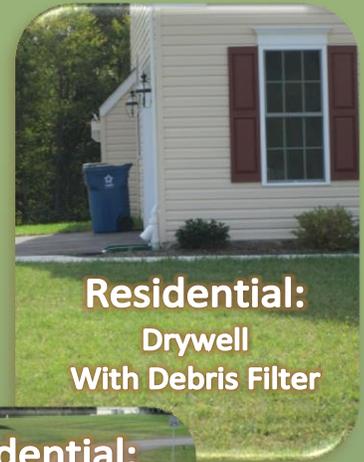
Carroll County since 2008 has been actively working on retrofitting existing stormwater management facilities to address our Phase I National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit requirements. Not only are we moving forward in reaching our impervious restoration goals, the County is accomplishing restoration of its old stormwater

January 21, 2015



Environmental Site Design

(non-structural practices)



**Residential:
Drywell
With Debris Filter**



**Residential:
Extended Shoulder**



**Commercial:
Parking Island
Filtration/
Infiltration**



**Urban Stormwater
Retrofit**

management facilities by bringing them up to current standards and redesigning these facilities to allow for easier access and maintenance. The majority of the facilities are designed to treat one inch of water quality, while providing infiltration and channel protection. The main goal is to reduce the amount of water leaving the facility to decrease the downstream property impacts and improve runoff water quality.

Stormwater mitigation and watershed restoration provide a significant water quality and quantity benefit to our local streams and water bodies, including nutrient reduction, sediment and erosion control, and flood control. These activities and practices also contribute to improving the health of the Chesapeake Bay. It should be noted, however, that consensus has not been reached on the true magnitude of projects constructed in Carroll County when evaluation of their impacts is limited strictly to Bay improvement.

Staff

Approximately **22 (about 44%) employees out of 50** in the Department of Land Use, Planning, & Development are involved in watershed restoration initiatives – 3 on a full-time basis, 8 on a part-time basis greater than 50 percent of their time, and 11 on a part-time basis of less than 50 percent. Additional employees are involved with maintenance in the Department of Public Works.

Expenditures & Budget

Carroll County's annual operating expenditures for this program have more than doubled since 2008, from approximately \$334,000 annually, to more than \$1.1 million annually. **From July 2005 to May 2014, the County invested more than \$10 million** – not including more than \$2.9 million in grants from outside sources – in Capital outlays. Additionally, \$20.5 million have been dedicated to watershed restoration efforts in our Community Investment Program, or CIP, for Fiscal Years 2015 through 2020.

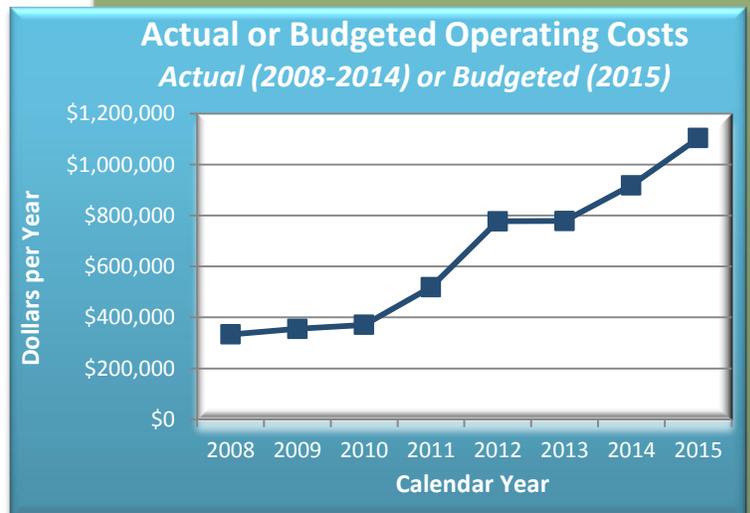
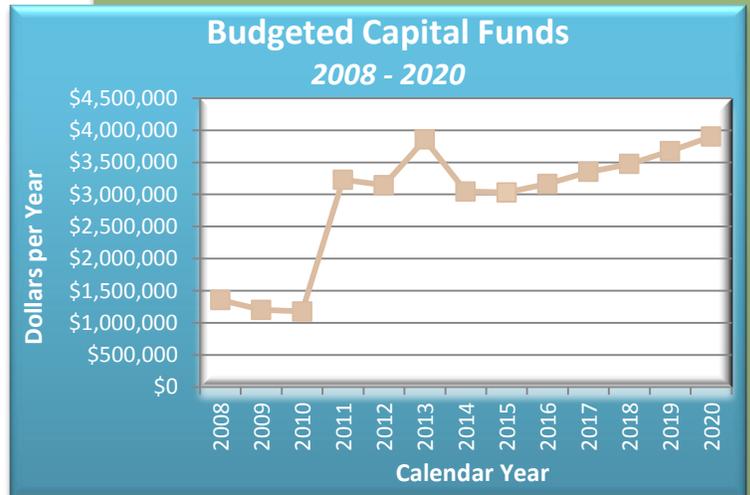
For the 13-year period (2008-2020), Carroll County will invest more than \$10.7 million in operating expenses and more than \$30.6 million in capital expenditures for a grand total of \$41.3 million – assuming that we receive no additional grants. This equates to an annual expenditure of approximately \$3.2 million per year. Average annual expenditure will increase to \$4.5 million for FY 2015-2020.

Progress

The Phase I MS4 permit mandates a 20 percent restoration requirement for impervious surfaces in the unincorporated areas of the county, with a total restoration requirement of 30 percent. **As of December 2014, restoration of 23 percent of that impervious surface had been achieved. Funds have been budgeted in the FY 2015-2020 CIP to restore the remaining 7 percent**

January 21, 2015

FY 2015-2020	Capital	Operating
Total Budget	\$20,598,000	\$6,621,258
Average Annual Budget	\$3,433,000	\$1,103,543



Impervious Area	Acres	Percent
Untreated County	6,715	2.3% of County area
Restoration Requirement	2,016	30% of Total Urban Impervious
Progress to Date	1,531	23%



Facility at Westminster High School

Beneficial Capture, Treatment, & Release of Stormwater Runoff





Watershed Assessments and Planning

Four rounds of stream corridor assessments are complete. Through these assessments, the general condition of a stream system can be quickly assessed and measures identified to improve the overall health of the drainage network. Eight types of impairments are assessed, including stream bank erosion, inadequate streamside buffers, trash dumps, pipe outfalls, exposed pipes, channel alteration, in-stream construction, and fish blockages.

The 2014 assessment focused on two major watersheds – Conewago Creek and Lower Monocacy. County staff works closely with property owners to access streams on their properties in these watersheds, with about 52 percent granting permission to perform the stream walk. As a result, staff accomplished **assessments on roughly 21 of the 41 miles (51%) of stream corridor** within these watersheds.

Due to the cooperation of private landowners, as of April 2014, staff overall achieved **assessments in 6 of the 9 major watershed basins** within the county, addressing **over 518 of the 820 stream miles within these 6 watersheds.**

Septics

Conventional Septic System Replacement with Best Available Technology (BAT)

Maryland Department of the Environment adopted regulations requiring all new septic systems installed to use Best Available Technology (BAT) to reduce the potential new nitrogen loads resulting from new development. The Carroll County Health Department works with private property owners to replace failing conventional systems with BAT systems. The Health Department administers monies from the Bay Restoration Fund to help pay for eligible systems.

Conversion from Private Septic to Public Sewer System Connection

Carroll County works closely with its eight municipalities on public water and sewer planning. In the process of identifying potential future public sewer service areas, areas on existing private septic systems are often considered for inclusion in the Future Sewer Service Area, particularly if systems are documented to be failing.

Conversion from private septic to public sewer for these homes helps to reduce the amount of pollution to the Bay. The Health Department administers assistance from the Bay Restoration Fund to help pay for the conversion to a public system.



Areas in Need of Restoration



Action	# of Septics
Conventional System Replaced with BAT ⁶ : 2009-2014	105*
Conversion from Conventional System to Public Sewer Service: 2006-2014	22*

* As of December 2014

Solid Waste & Recycling

Carroll County Bureau of Solid Waste

SolidWasteRecycling@ccg.carr.org

<http://ccggovernment.carr.org/ccg/pubworks/>

410-386-2248 (solid waste)

410-386-2035 (recycling)

Carroll County actively seeks to divert waste from the landfill.



Recycling participation is on the rise in Carroll County. Options for both curbside and drop off opportunities have increased, as has the type of materials that can be recycled.

Curbside, single-stream recycling was implemented in 2007 (and expanded in 2008), making it easy and convenient for residents to participate. Most standard household recycling can simply be placed at the curb.

Carroll's newly renamed Resource Recovery Facility is conveniently located in the center of the county and accepts many items that are not eligible for curbside pickup, such as Styrofoam, electronics, automobile batteries, antifreeze/waste oil, cooking oil, and textiles. Carroll County has taken advantage of grant opportunities to purchase and distribute large recycling containers that added to the ease of handling curbside recycling.

Carroll County also encourages property owners to divert yard waste from the landfill. Citizens can dispose of grass, leaves, and branches in the mulching area of the Resource Recovery Facility. These items are mulched, and the mulch is made available to the public. Citizens are encouraged to consider backyard composting. The County provides an opportunity to purchase compost bins and rain barrels at a discounted rate in the spring.

The Recycling program offers a semi-annual household hazardous waste collection to ensure household chemicals are not improperly discarded. The Recycling office diligently works to inform citizens and instill the "Reduce, Reuse, Recycle!" theme.

Through all recycling efforts, **the County has achieved a 41 percent recycling and waste diversion rate that includes a 5 percent source reduction credit in 2012** (based on Maryland Department of the Environment Recycling Report). The State-mandated recycling rate is 35 percent.

To proactively address changing and future solid waste needs, a Solid Waste Work Group evaluated options and prepared a report with recommendations. A Solid Waste Advisory Council (SWAC) was established in 2014 to help implement recommendations of the various solid waste plans and advise staff. The SWAC began by developing their mission statement. County staff is working with a consultant to evaluate the County's 2006 Solid Waste Management Plan (as updated). Updates are provided to the SWAC.



Accepted through Single-Stream, Curbside Recycling

- ◆ Glass jars & bottles
- ◆ Aluminum, tin and steel cans, contains and foil
- ◆ Cereal boxes and other paperboard boxes
- ◆ Cardboard
- ◆ Aseptic/gable-top milk and juice cartons
- ◆ Books
- ◆ Plastics bags and film (bagged together)
- ◆ Plastic bottles
- ◆ Magazines and catalogs
- ◆ Newspaper, office paper, and junk mail
- ◆ Plastics containers #1-#7 (except #6)
- ◆ Paper bags
- ◆ Cardstock, color paper
- ◆ Shredded paper (in sealed or tied bag)
- ◆ Aerosol cans (empty)
- ◆ Rigid plastics

Accepted at Resource Recovery Facility

(either on a regular basis or part of special event)

- ◆ Styrofoam
- ◆ Residential Electronics
- ◆ Household Hazardous Waste
- ◆ Textiles
- ◆ Backyard Trimmings
- ◆ Vinyl Siding
- ◆ Car batteries, antifreeze, and waste oil

Water Resources Coordination Council (WRCC)

Carroll County Land Use, Planning & Development
<http://ccgovernment.carr.org/ccg/plan/wrcc/>

410-386-2145
ccplanning@ccq.carr.org



The Water Resource Coordination Council (WRCC) was formed in March 2007 by a non-binding joint resolution (#697-07) between the County, municipalities, and Carroll County Health Department. The Council provides a mechanism for cooperative problem solving of critical water resource management issues facing the County and municipalities. The Council fosters discussion between jurisdictions in order to develop regional (watershed) or countywide approaches to policies, procedures, and solutions regarding water resource development and protection. The WRCC offers a forum for the dissemination of ideas, solutions, and cost-saving approaches to water resource development and protection in Carroll County.

Among other things, the WRCC worked collaboratively to develop a Water Resources Element (WRE). The WRE identifies drinking water and other water resources needed for existing and future growth. It also identifies suitable receiving waters (where stormwater and treated wastewater can be discharged) and land areas for stormwater management and wastewater treatment. In Carroll County, the WRE addressed the County and all eight municipalities in one document and was jointly adopted. The WRCC also serves at the local Watershed Implementation Plan team, addressing issues related to the local implementation of the Chesapeake Bay Total Maximum Daily Loads (TMDLs).

The members have worked together to address cost-sharing of stormwater projects and provide shared staff to address NPDES MS4 compliance work. On October 23, 2014, the Board of County Commissioners and the Mayors of all eight municipalities signed a Memorandum of Agreement (MOA). With the MOA, the Board committed to funding 80 percent of the municipalities' capital costs for stormwater mitigation projects. In December 2014, MDE issued the County's fourth generation NPDES Phase I MS4 permit, in which the municipalities were named as co-permittees. The MOA outlines the distribution of permit responsibilities.

Environmental Advisory Council

Carroll County Land Use, Planning & Development
<http://ccgovernment.carr.org/ccq/eac/>

410-386-2145
eac@ccq.carr.org



Originally formed as the Environmental Affairs Advisory Board in the early 90s, the Board of County Commissioners created the Environmental Advisory Council (EAC) through County Code (Chap. 31) in 2004. The EAC is dedicated to exploration and promotion of the County's environmental management responsibilities, to providing the Commissioners with educated advice that is in the best interest of the County and the County's residents, and to promote environmental educational. The EAC functions at the direction of the Carroll County Board of Commissioners and, as such, works cooperatively with County environmental staff to research environmental policy issues; to advise the Board of County Commissioners; to foster environmental education; and generally to act in the best interest of County residents by promoting effective environmental protection and management principles. The EAC recognizes the accomplishments of local community members and groups through a biennial awards process.



Environmental Awareness Awards

References

- ¹ Bowers, Deborah. 2012. Farmland Preservation Report. <http://www.farmlandpreservationreport.com/>
- ² Maryland Department of Agriculture. Maryland Agricultural Water Quality Cost-Share Program. 2013. *Powering the Bay Cleanup: 2013 Annual Report*. http://mda.maryland.gov/resource_conservation/counties/MAC SAR2013.pdf
- ³ Carroll County Land Preservation, Parks, and Recreation Plan. 2012.
- ⁴ Carroll County, Maryland, Forest Conservation Technical Manual. May 2011. <http://ccgovernment.carr.org/ccq/resmgmt/forconsmanual.pdf>
- ⁵ Slater, James E. Jr., and Glenn D. Edwards. 2010. "Chapter 4 Incentive Driven Conservation," *A Sustainable Chesapeake: Better Models for Conservation*, The Conservation Fund. <http://www.conservationfund.org/a-sustainable-chesapeake-better-models-for-conservation/>
- ⁶ Carroll County Health Department. 2014.