



Environmental Stewardship in Carroll County

2023
Quick Reference

August 16, 2023

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.



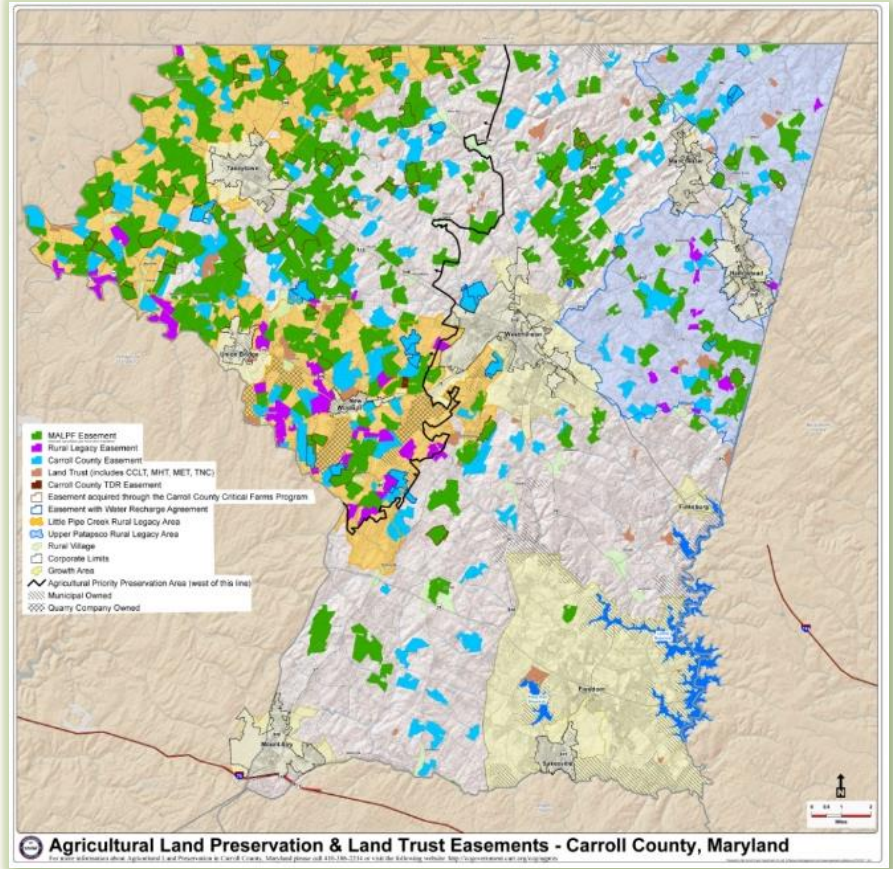
Agriculture



**Celebrating 75,000 Acres
Preserved & Growing**
[CelebratingAgPres.
CarrollCountyMD.gov](http://CelebratingAgPres.CarrollCountyMD.gov)

Carroll County achieved a major milestone in 2020 by reaching 75,000 acres preserved in October 2020, three-quarters of the way toward the County's 100,000-acre goal.

Program	Acres Preserved
MALPF	46,239
Carroll County	24,072
Rural Legacy	5,408
Land Trusts & Conservancies	2,562
Total	78,281



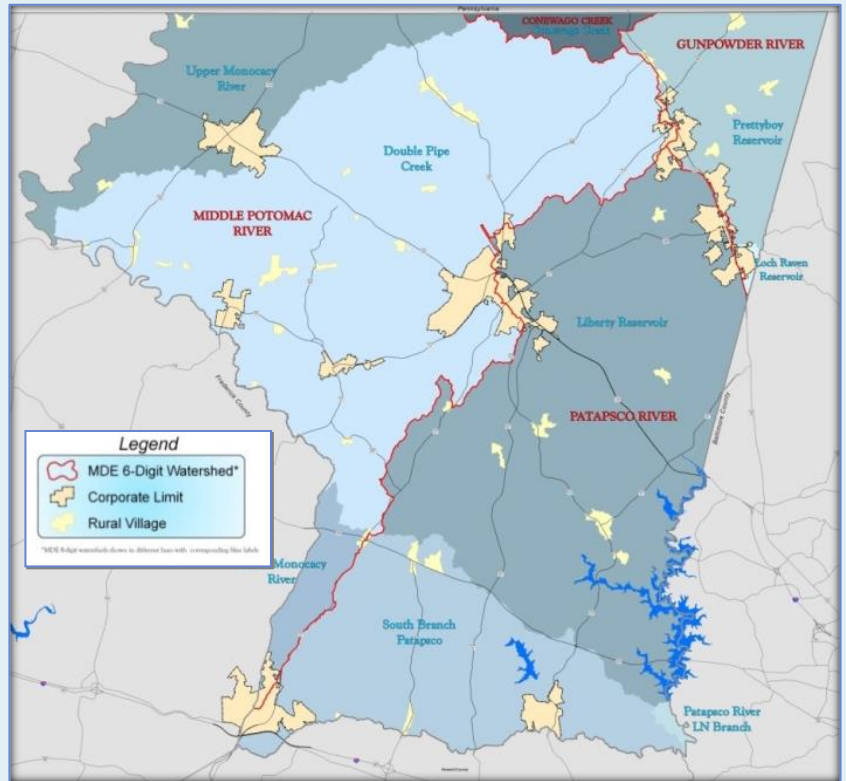
- Since FY 1980, Carroll spent over \$251M in State & County funds toward achieving the goal of 100,000 ACs of farmland preserved.
- Carroll ranks among the top county programs in the U.S. with the number of acres preserved through conservation easements.

- From FY 1980 through June 30, 2023, 78,281 acres were permanently preserved through easement programs, which is roughly 1/4 of the total county land area.
- In FY 2021 and FY 2022, the Cover Crop Program in Carroll County saw another successful enrollment of **over 29,294 and 22,640 acres**, respectively.



Watersheds

- Carroll protected 105 miles of buffered streams under easements.
- As of December 2023, water recharge areas were protected on 3,778 acres incorporated into 30 easements.
- Little Pipe Creek and Upper Patapsco Rural Legacy Areas encompass 58,575 and 40,170 ACs of land, respectively.
- For every 1,000 residents, Carroll provides 48 AC of parks & recreation lands + 36 AC of natural resource lands



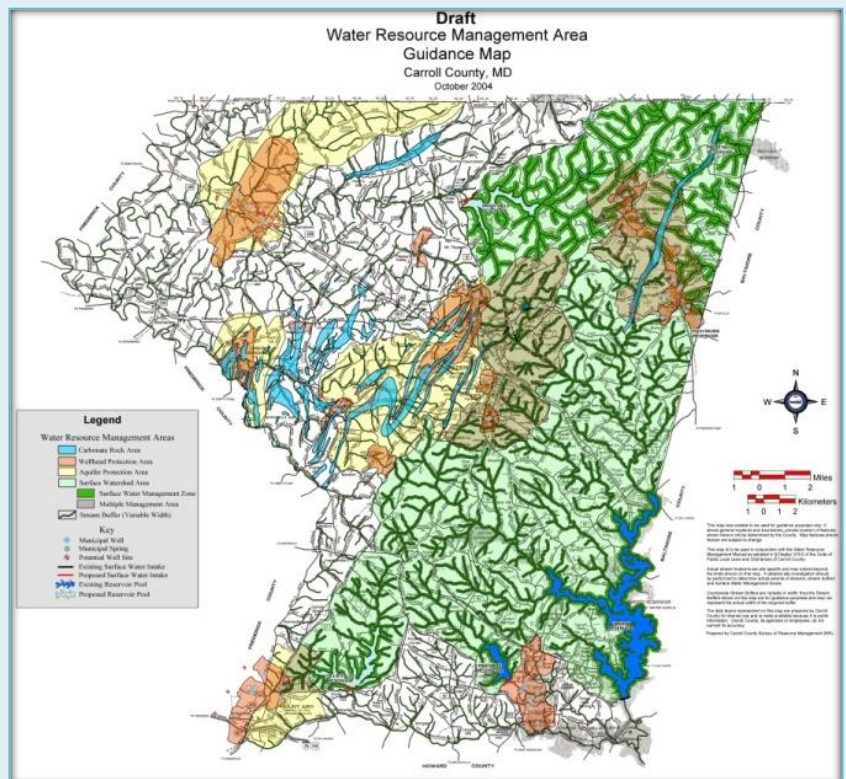
Carroll County drains to 9 different watersheds:

- Upper Monocacy River
- Conewago Creek
- Prettyboy Reservoir
- Double Pipe Creek
- Liberty Reservoir
- Loch Raven Reservoir
- Lower Monocacy River
- South Branch Patapsco River
- Lower North Branch Patapsco River

Easement Type	Acres Preserved	# of Easements
Water Resource Protection	2,138	434
Floodplain Protection	813	235
Forest Conservation	4,673	1,685
Totals	7,624	2,354

Carroll County Forest Conservation Acres Banked

Element	Acres
On-site retention	2,668
On-site planting	968
Off-site planting	138
Total bank acres	838



Carroll County has achieved a FEMA Community Rating System of Class 6, effective October 23. This results in discounted flood insurance premiums for property owners.

Urban Stormwater Mitigation

Citizens throughout the county can call the non-emergency Stormwater Pollution Prevention Hotline to report suspected illicit discharges, illegal dumping, and spills.

410-386-2210

Under the MOA, the Carroll County Commissioners pay 80% of the municipalities' capital costs to meet their restoration requirement.

As of December 29, 2019, the end of the County's and municipalities' fourth-generation permit, 882.82 additional impervious acres have been restored.

Annual operating expenditures for the stormwater program more than doubled since 2008, from ~\$334,000/yr to >\$3.5M/yr.

From July 2005 to June 2022, the County invested almost \$40M in capital outlays, including >\$17.7M in grants from outside sources.

For the 6-year period 2023 to 2028, Carroll will invest about \$27.7M in operating and >\$23.6M in capital expenses, assuming no additional grants are received.

This equates to an annual expenditure of >\$8.56M over that period.

Since spring 2013, 251.85 acres of trees have been planted in Carroll County on both private landowner properties as well as municipality-owned land. Plantings by watershed include:

- 61.08 acres in Double Pipe Creek
- 67.40 acres in Liberty
- 5.77 acres in Loch Raven
- 12.22 acres in Lower Monocacy
- 10.99 acres in Prettyboy
- 66.27 acres in South Branch
- 28.12 acres in Upper Monocacy



Impervious Area	Acres	Percent
Untreated County	8,070	2.8% of County area
Restoration Requirement	1,614	20% of Total Urban Impervious
Progress to Date for This Permit Term	1,629	~101%

FY 2023-2028	Capital	Operating
Total Budget	\$23,602,865	\$27,718,615
Average Annual Budget	\$3,933,811	\$4,619,769

Capital Expenditures: Actual & Budgeted*
2008 - 2028



Actual Operating Costs
2008-2022




Protecting Carroll County Waters

<https://www.carrollcountymd.gov/government/directory/land-resource-management/protecting-carroll-county-waters-npdes/>

Renewable Energy

An Overview of Renewable Energy Choice Options for Consumers




Renewable energy technologies are becoming more widely available and more affordable. This document provides an overview of the various options available to consumers, including solar, wind, hydro, and geothermal. It also discusses the benefits of renewable energy, such as reduced greenhouse gas emissions and lower long-term costs.



Lot Size	Solar Panel Surface Area Maximum Square Footage for Ground-Mounted Systems in Residential Zones
<= 1/2 acre	120 square feet
>1/2 acre	240 square feet
>1 acre to 3 acres	480 square feet
>3 acres	Aggregate square footage of the roof, or roofs of structures, situated on the subject property


A Guide to Residential Solar Installation in Carroll County



This document provides a comprehensive guide to residential solar installation in Carroll County. It covers the entire process from initial consultation to final installation, including zoning requirements, permitting, and financial incentives. A table of contents is provided for easy navigation.

- The County installed solar arrays on 3 different County properties – Carroll Community College, Hoods Mill Landfill, and Hampstead WWTP – to conserve energy and to save money. These facilities came online in 2018.
- In effort to encourage the finance of energy efficient and renewable energy projects and upgrades, Carroll County participates in the Property-Assessed Clean Energy financing program (PACE). This program is available to commercial and industrial properties.

A Guide to Becoming a Community Solar Subscriber in Carroll County



This document provides a comprehensive guide to becoming a community solar subscriber in Carroll County. It explains the benefits of community solar, the application process, and the various options available to subscribers. A table of contents is provided for easy navigation.

- In 2018, Carroll County received a Silver Designation by the national SolSmart program.

Permits Issued in Carroll County for Solar Energy Conversion Facilities FY 2015 – FY 2022

Fiscal Year	# of Permits
2015	383
2016	606
2017	463
2018	312
2019	194
2020	157
2021	159
2022	174




Why Subscribe to Community Solar?

Community solar allows you to invest in solar energy without the need for solar panels on your own property. It offers a variety of benefits, including reduced energy costs, environmental benefits, and the ability to support local renewable energy production.

Recycling

Carroll achieved a 47.29% recycling/waste diversion rate, including a 5% source reduction credit in 2018, over the State-mandated 35% rate.

For more information...
 Contact Brenda Dinne,
 EAC Secretary/Staff Liaison:
bdinne@CarrollCountyMD.gov
 or 410-386-2140 or visit
CarrollCountyMD.gov/EAC.




Septics



Conventional Septic System Action	# of Septics
Replaced with BAT: 2009-2022	278
Converted to Public Sewer Service: 2006-2022	26

Public Outreach

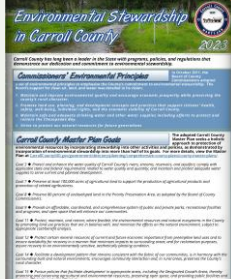
Carroll County & Municipalities NPDES MS4 Public Outreach Plan



Stormwater Pollution Prevention for Homeowners



Environmental Stewardship in Carroll County



Full Booklet