

Climate Resiliency

Taking Action In Charles County

Charles County Government is working to reduce greenhouse gas emissions, transition to 100 percent renewable electricity, improve sustainability in county operations, and educate the county workforce on climate change mitigation and adaptation measures.

Resiliency Planning and Financing

Charles County is one of three vanguard counties in the state working with the University of Maryland Center for Global Sustainability on a project called Resiliency Planning and Financing for Maryland Counties. The goal of the project is to develop Resilience Action Plans to establish planning and financing systems in pursuit of climate change resilience. The effort includes elements such as:

- The essential role of multi-community collaboration and coordination.
- Ensuring resilience efforts address needs of the most vulnerable populations.
- Integrating resilience planning into every aspect of local government operations.
- Approaching resiliency as a community asset rather than an obligation.
- Addressing the limitation of fiscal resources and understanding how to prioritize actions among multiple departments and stakeholders.
- Aligning priorities and resources with community goals to jumpstart the resiliency process.

Maryland Climate Leadership Academy

Charles County Government employees are taking full advantage of professional credentialing opportunities offered through the Maryland Climate Leadership Academy, the nation's first state-sponsored institution with continuing education and executive training programs designed for local government officials. As a part of this learning opportunity, Charles County is hosting a class throughout the fall month. More than 20 county employees are taking the training, which will include relevant professional disciplines, such as planning, fiscal, public works, and utilities.

County Government Efforts

Planning is underway for construction projects for solar arrays on county-owned land that will more than offset 100 percent of electricity needs for county buildings and facilities.

The county has worked to reduce greenhouse gas emissions by utilizing appropriate landfill covers and upgrading the current passive collection system to one that actively captures emissions. Additionally, several measures have been instituted to increase the recycling rate to 46 percent, added to a 4 percent source-reduction-credit, equals a total-waste-diversion rate of 50 percent.

Shoreline restoration along the Potomac and Wicomico Rivers has also been prioritized with the completion of a scientific assessment that identified 153 sites along 27 miles of shoreline as in most need of restoration for ecological services benefits, including storm surge buffering, carbon sequestration, wetlands restoration, and habitat creation.

Charles County received a community resiliency grant from the Maryland Department of Natural Resources to identify the sources of nuisance and urban flooding, analyze the associated hazards, and identify actions to increase community resiliency. The result of the project will be a chapter on resiliency added to the county's Hazard Mitigation Plan.



County Government Overall Energy Savings Efforts

Waldorf West Library achieving LEED Silver designation.

Energy efficient upgrades to lighting and HVAC systems were completed at various county buildings.

The Energy Savings Performance Contracting program is lowering energy needs and costs by **reducing fossil fuel usage** through equipment replacement and efficiency upgrades.

The **sewer system force main design** requires lower flow velocities than typical designs, reducing energy use.

The Mattawoman Wastewater Treatment Plant's **Flow Equalization System** will provide diurnal flow balancing, decreasing resource use, and increasing process performance. During extreme weather events, flow equalization will prevent backups and sewer overflows.

Climate **4** Resiliency The 4 Key Focus Areas



Charles County is leading by example and interviewing experts in the field to aid our community's understanding of the impacts of climate change. Tune into the Charles County Unscripted podcast to learn more about how Charles County is working to mitigate and adapt to a changing climate. Featured guests include: Dr. Peter Goodwin, President of the University of Maryland Center for Environmental Science; Secretary Ben Grumbles, Maryland Department of the Environment; and Nancy Kopp, Maryland State Treasurer. You can also hear from County officials and departments on how Charles County is building capacity for better decision making and leading local government efforts in climate resiliency planning.

The first podcast in our series is available at www.CharlesCountyMD.gov/Podcasts, and the remaining edition will be available prior to January 1, 2020. *The Charles County Government podcasts are also available on Apple Podcasts and Google Play.*

"Maryland is among the states most vulnerable to climate change. Rising sea levels, along with increased storm intensity, have devastating and far-reaching environmental and economic impacts on Chesapeake Bay and the quality of life Marylanders enjoy. Maryland's sizable farming community could suffer costly losses during extreme droughts and heat waves. Marylanders everywhere will face increased risk of flooding and significant property damage as a result of more precipitation and other extreme weather events. Children, the elderly, and other sensitive populations are vulnerable to the effects of heat waves and increased air pollution. For these reasons, addressing climate change must be among the state's highest priorities."

— Climate Change Maryland • EmPOWER Maryland

Learn more: www.ClimateChange.Maryland.gov/science/