



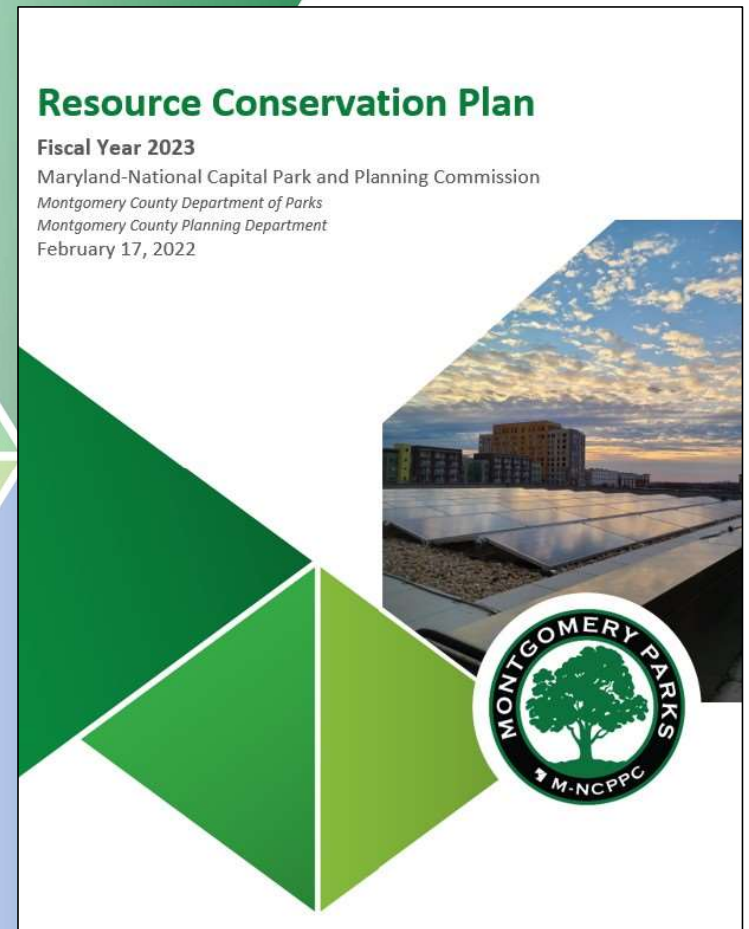
M-NCPPC, Montgomery County

***FY23 Resource Conservation Plan (RCP)
2021 Business Recycling & Waste Reduction Report***

***Planning Board Item 6
February 17, 2022***

The Resource Conservation Plan



- Summarizes the programs and projects implemented to improve the efficient use of water resources and energy-related utilities on Commission property.
- Report is presented the M-NCPPC Planning Board, the County Executive Committee, and the County Council Transportation and Environment Committee.



Achieving Sustainability and Tackling the Climate Crisis

Resource Conservation Plan

Fiscal Year 2023
Maryland-National Capital Park and Planning Commission
Montgomery County Department of Parks
Montgomery County Planning Department
February 17, 2022



Maryland National Capital Park and Planning Commission

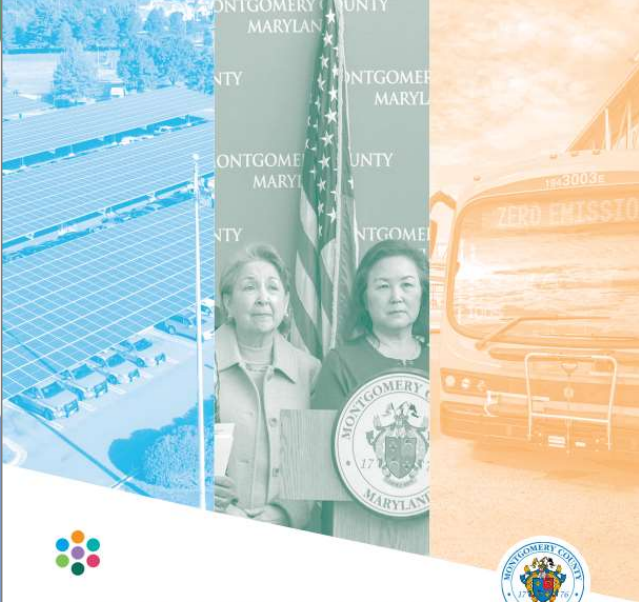


Extended through FY22

Sustainability Plan



FY20 - FY21

Montgomery County Department of Parks
Montgomery County Department of Planning



MONTGOMERY COUNTY CLIMATE ACTION PLAN

Building a Healthy, Equitable, Resilient Community
PUBLIC DRAFT



FY21 Utility Expenditures

	FY21 Cost	FY21 Budget	Difference
Parks Department	\$1,576,162	\$2,263,022	\$686,860
Enterprise	\$814,704	\$965,900	\$151,196
Property Management	\$36,687	\$25,700	(\$10,987)
Wheaton HQ	\$536,904	\$764,659	\$227,755
Planning	\$85,854	\$52,897	\$52,897
Bi-County	\$51,763	\$82,464	\$30,701
TOTAL:	\$3,102,074	\$4,154,642	\$1,138,423

Data obtained from M-NCPPC General Ledger

FY21 Projects at a Glance

Project Type/Category	Completed
Energy Efficient Appliance/Unit	2
Energy Efficiency via Automation	4
LED Light Fixtures	4
LEED Building	1
Solar Panels	3
Water Efficiency/Advanced Water Management	6



FY22 Utilities: Budget, Cost-to-Date & Projections

	FY22 Budget	Cost as of 1/4/2022	FY22 Projection	Difference
Parks Department	\$2,241,777	\$807,156*	\$2,138,660	\$1,478,756
Enterprise	\$910,186	\$352,390	\$884,486	\$25,700
Property Management	\$25,700	\$17,694	\$29,800	(\$4,100)
Wheaton HQ	\$764,659	\$459,996	\$741,000	\$23,659
Bi-County	\$75,695	\$25,408	\$75,695	\$0
TOTAL:	\$4,018,017	\$1,662,643	\$3,869,641	\$1,524,015

Data obtained from M-NCPPC General Ledger

*Includes \$79 electric for Admin Fund

FY22 Projects at a Glance

Project Type/Category	Completed	In Process	Planned
Energy Efficient Appliance/Unit	3	2	1
EV/Equipment Charging Station	2		2
LED Light Fixtures	4	7	4
Solar Panels		1	
Maintenance Efficiency/Infrastructure Improvement	1	1	
Water Efficiency/Advanced Water Management		10	1



Cabin John
Maintenance



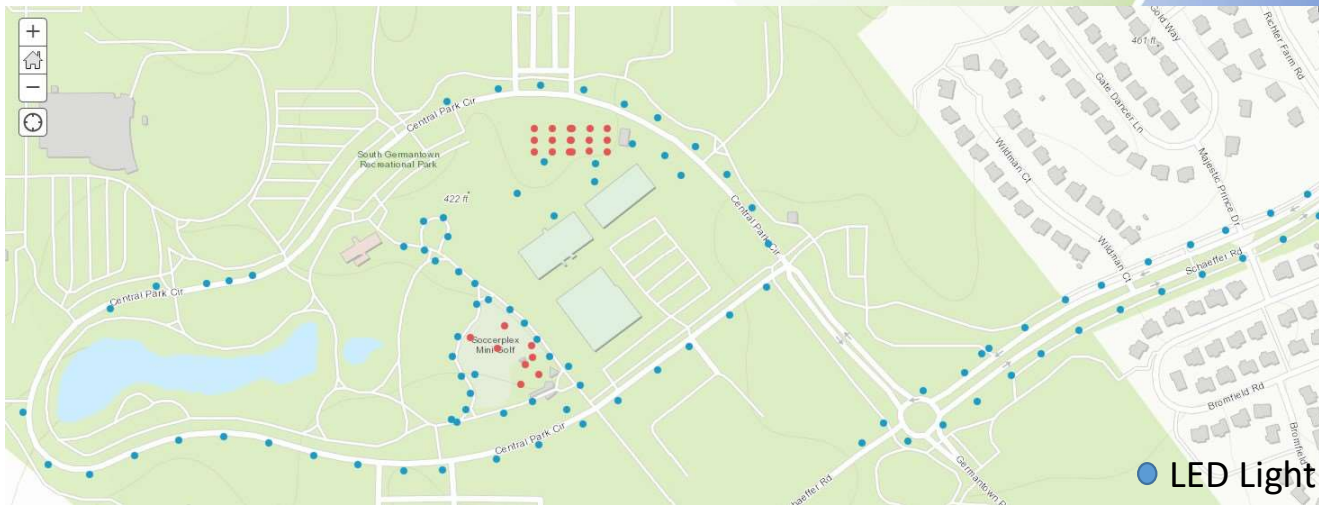
Waters House
Special Park



South Germantown
Recreational Park

South Germantown Recreation Park LED Retrofit

- 62 poles retrofit from HPS to LED technology
- LED light lifespan is roughly 50,000 hours, much longer than the 10,000-hour life span of a traditional HPS
- LED has no fragile components that need to be maintained
- Nearly 64% of the material cost of this project was provided via rebate through the EMPOWER Maryland program



South Germantown Recreation Park LED Retrofit

Q4 data for energy consumption and cost over the previous 4 years show a significant reduction in both energy used and dollars spent to light this park at night.

CONSUMPTION (kWh)				
	October	November	December	TOTAL
2021	2,521	4,597	4,983	12,101
2020	9,819	10,782	13,416	34,017
2019	10,113	12,807	13,133	36,053
2018	10,287	15,438	16,117	41,842

COST				
	October	November	December	TOTAL
2021	\$344.08	\$556.89	\$596.59	\$1,497.56
2020	\$1,205.06	\$1,306.66	\$1,603.55	\$4,115.27
2019	\$1,240.80	\$1,531.57	\$1,547.21	\$4,319.58
2018	\$1,448.74	\$1,991.52	\$2,135.63	\$5,575.89

Consumed nearly 22,000 less kWh of energy in Q4 of 2021

Provided savings of over \$2,600 in Q4 of 2021



FY23 Planned Projects and Goals

Project Type/Category	Planned
Energy Efficient Appliance/Unit	1
Energy Efficiency via Automation	1
LED Light Fixtures	2
Solar Panels	1
Maintenance Efficiency/Infrastructure Improvement	2
Water Efficiency/Advanced Water Management	3



Energy Conservation/Efficiency:

- Support initiatives internally and county-wide to reduce greenhouse gas emissions.
- Improve building envelope assessments at start of projects.
- Continue making progress retrofitting interior and exterior lighting to LED technology.
- Continue upgrading to high-efficiency appliances and equipment.
- Begin prioritizing projects to eliminate on-site fossil fuel burning (natural gas, propane, heating oil) with the ultimate goal of electrifying these functions with renewable energy resources.



Renewable Energy:

- Continue to identify and implement small-scale solar PV projects and seek opportunities for larger-scale installs.

Water Conservation/Efficiency:

- Continue upgrading to low-flow and advanced water management technology.
- Implement appropriate opportunities for stormwater and/or graywater harvesting reuse projects.

FY23 Proposed Utility Budget



Proposed Budget FY23	
Parks Department	\$2,259,488
Enterprise	\$874,000
Property Management	\$34,000
Wheaton HQ	\$782,021
Planning Department	\$5,200
Bi-County	\$87,128
TOTAL:	\$4,041,837



M-NCPPC Annual Recycling & Solid Waste Management Report to Montgomery County Recycling & Resource Management Division



M-NCPPC Recycling and Solid Waste Management Program

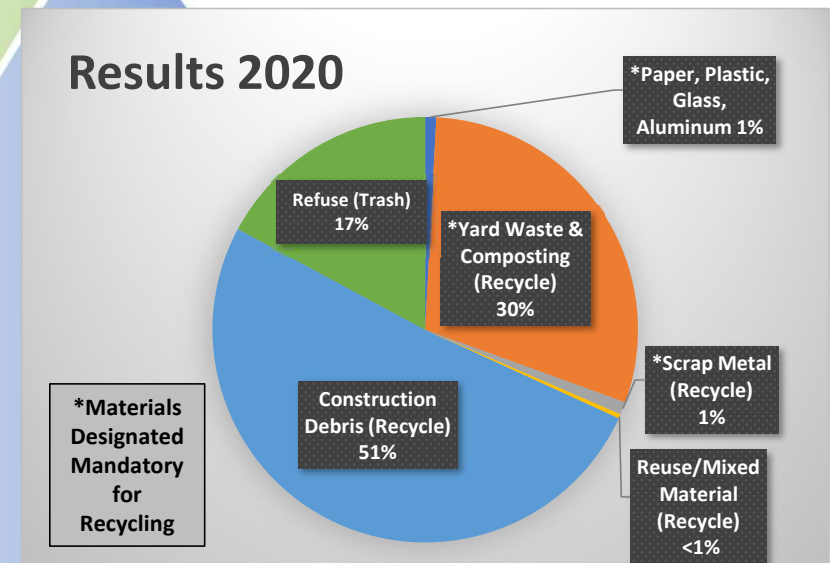
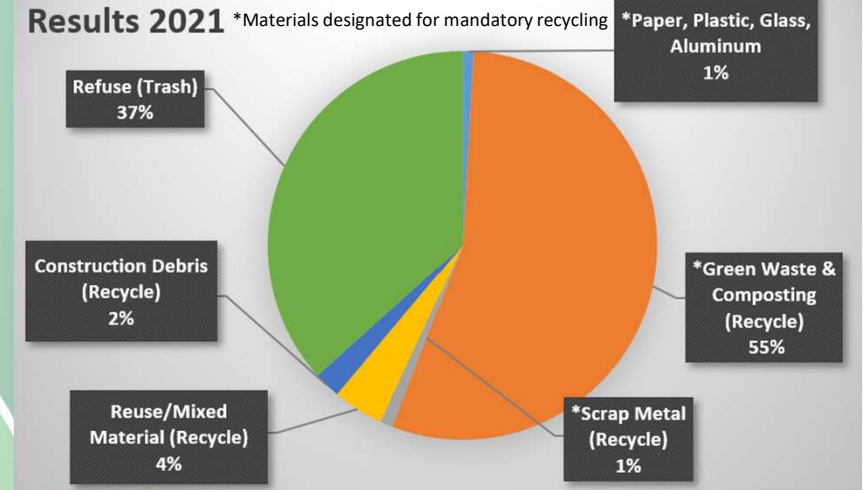
- Business recycling became mandatory county-wide in 1993.
- Changes to requirements have been made over time: adding additional mandatory recycled materials, further clarification of roles and responsibilities of the businesses, and added collector/hauler requirements – including reporting.
- M-NCPPC disposes of trash and recycling through a mix of self-hauling and use of vendors.



Program Progress: 2021 Results

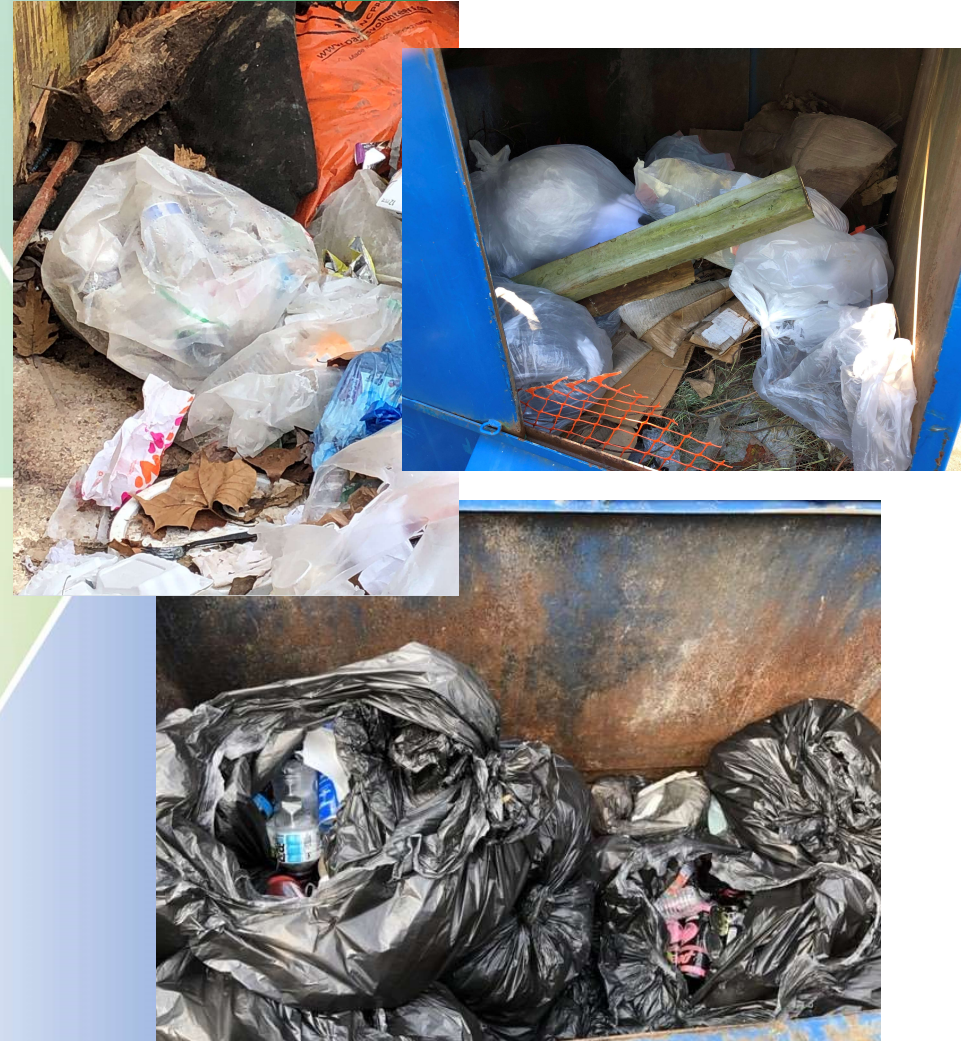
- **Total Waste Diversion Rate: 63.3%**

- Less commingled, mixed paper, & scrap metal recycling in 2021 (mandatory materials).
- Consistent green waste recycling (compost, mulch etc.).
- Significant increase in voluntary recycling (tires).
- Significant decrease in construction debris recycling.
- Increase in material sent to trash.



Waste Audit Program Update

- **Program Goal:** Assess waste sorting practices and identify missed opportunities to recycle more.
- Unannounced assessment of trash dumpsters at staffed locations began in 2020 and continued through 2021.
- Assessments are conducted, characterization of waste is recorded, and solution-oriented report is provided to management.



Volunteer Stream & Park Cleanups

2021 AT A GLANCE

Tires: 87

Bags of Trash: 2,182

Bags of Recycling: 977

Pounds Trash: 92,325

of Volunteers: 4,180

Hours: 9,017



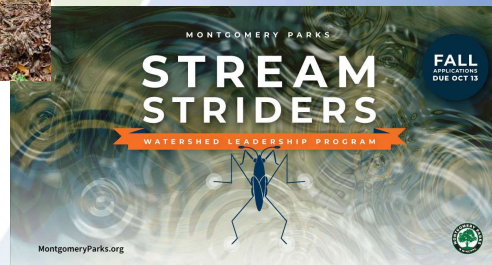
Rosemary Hills-Lyttonsville LP



Twinbrook Connector



Long Branch



Sligo Mill NCA

- Annual Cleanup Days
 - MLK Day of Service
 - Earth Month
 - Community Service Week
 - World Cleanup Day
 - 9/11 Day of Service
 - National Public Lands Day
 - New Hampshire Estates Community Cleanup
- Stream Striders Watershed Leadership Program
 - *8 stream striders, 27 cleanups, 60+ volunteer hours*



Questions?