WORK PROGRAM AND BUDGET

Regional Environmental Resources Management

Fiscal Year 2021



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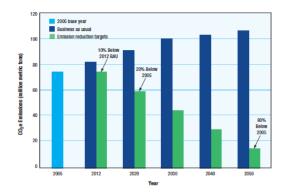
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REGIONAL ENVIRONMENTAL RESOURCES MANAGEMENT

This is the Annual Work Program and Budget document for Metropolitan Washington Council of Government's (COG) Regional Environmental Resources Management Programs for Fiscal Year 2021 (FY 2021). The budget is based on the FY 2021 fees schedule approved by the COG Board in November 2019. It includes information on COG's regional environmental resources programs, committee oversight, budgets and key deliverables. The work program is structured to meet the needs of COG's members to address critical regional environmental resources issues.

The Regional Environmental Fund (REF) was established in 1988 as a complement to the Regional Water Fund to support COG's work on regional environmental resources issues. This originally included energy planning, household hazardous waste, brownfields, indoor air quality, radon control, and recycling and solid waste. The areas of focus have evolved over the years to meet the needs of COG's members. Contributions to the REF support COG's environmental resources programs.

The Climate, Energy and Environment Committee (CEEPC) plans and implements measures to meet the greenhouse gas reduction targets adopted by the COG Board and integrated in COG's Region Forward Initiative. COG's regional greenhouse gas reduction targets are 10 percent reduction below business as usual by 2012; 20 percent below 2005 levels by 2021, and 80 percent below 2005 by 2050.



For FY 2021, the Environmental Resources section includes nine program areas, reflecting the most important regional environmental resources issues as defined by the COG Board of Directors and COG's membership:

- 1. Climate and Energy Policy Development;
- 2. Built Environment and Energy Advisory Committee (BEEAC),
- 3. Energy Infrastructure, Efficiency and Renewables;
- 4. Adaptation and Resiliency;
- 5. Public Advisory Committee (ACPAC);
- 6. Vehicle Emission Reductions;
- 7. Member Support/Environmental Resources Work Program Development;
- 8. Regional Solid Waste and Recycling Management;
- 9. Regional Agriculture and Forestry Management

The programs provide for policy development based on research, technical experts, and best practices. Pilot programs are developed to test technology and strategies and are often funded through a combination of grants and sponsorships. Oversight and direction for the Environmental Resources Work Program is provided by the CEEPC.

FUNDING SOURCES

COG's Regional Environmental Resources Programs are primarily funded by the Regional Environment Fund, with supplemental funding provided by allocations from COG member dues. Grants and other funding sources support specific projects and activities.

The information below provides background on these funding sources, notes the levels of funding that were approved for FY 2021 (see Table 1, page 5), and outlines how those funds are to be allocated (see Table 2, page 6).

<u>Regional Environmental Fund</u> - The REF is a voluntary, COG member fee-for-service contribution that supports COG's regional environmental resources programs. The COG Board of Directors adopted its member dues and regional fees in November 2019 and CEEPC adopts adopted its FY 2021 corresponding Work Program and Budget in the following May 2020. The REF is allocated among participating jurisdictions using the same population adjusted budget levels used for FY 2021 COG dues. See the FY 2021 Member Dues and Regional Fees presentation from the November 2019 COG Board meeting for further information on jurisdiction population data.

Note: All COG members except the Town of Bladensburg, City of Hyattsville, City of Laurel, Charles County, City of Frederick, Frederick County, City of Manassas, and City of Manassas Park contribute to the Regional Environmental Fund.

<u>COG Membership Fees and Funds</u> - The 24 members of COG pay annual dues at a per capita rate approved by the COG Board of Directors. For FY 2021, the per capita rate was set at \$0.775, with individual jurisdiction's total population adjusted cost increases capped at 6% over 2020 contributions. The Board allocates membership fees to COG programs to support match needed for federal and state grants and to supplement support for programs.

FUNDING LEVELS, BUDGETS AND ALLOCATIONS

Table 1 below lists the COG member funding contributions to the Regional Environmental Fund (as approved by the COG Board in November 2019). Table 2 shows all sources of funds used to support the environmental resources programs.

Table 1 - Local Government Environmental Fund - FY 202	Contribution to COG's Regional 21
Jurisdiction	Regional Environmental Fund Allocations
Alexandria, City of	\$22,200
Arlington County	\$33,234
Bowie, City of	\$8,120
College Park, City of	\$4,560
District of Columbia	\$100,088
Fairfax County	\$161,830
Fairfax, City of	\$3,623
Falls Church, City of	\$2,045
Gaithersburg, City of	\$9,880
Greenbelt, City of	\$3,197
Loudoun County	\$58,297
Montgomery County	\$139,219
Prince George's County	\$122,284
Prince William County	\$65,652
Rockville, City of	\$10,143
Takoma Park, City of	\$2,529
TOTALS	\$ 746,904

COG Regional Environmental Resources Management Programs						
Table 2 - Program Revenue and	Budget Allocatio	ns				
	Re	evenue Source	es			
Program Area	Regional Environmental Fund	Environmental Member Other		Total Budget		
I. Climate and Energy						
A. Climate Policy Development	\$136,354	\$116,429		\$252,783		
B. Built Environment and Energy Advisory Committee	\$121,080	\$101,439		\$222,519		
C. Energy Infrastructure, Efficiency and Renewables	\$170,900	\$143,003		\$313,903		
D. Adaptation and Resiliency	\$31,085	\$26,790		\$57,875		
E. Air and Climate Public Advisory Committee	\$29,600	\$27,100	\$28,472	\$85,172		
F. Vehicle Emission Reductions			\$1,300,000ª			
G. Management / Member Support	\$26,035	\$21,300		\$47,335		
TOTAL	\$515,054	\$436,061	\$1,328,472	\$2,279,587		
II. Recycling and Solid Waste M	lanagement					
A. Recycling and Solid Waste	\$135,000		\$50,000 ^b	\$185,000		
B. I-95 Waste Technical Committee			\$14,000	\$14,000		
TOTAL	\$135,000		\$64,000	\$199,000		
III. Regional Agriculture and Fo						
A. Regional Agriculture	\$26,500	\$3,000	\$225,000	\$254,500		
B. Forestry Management	\$50,400	\$26,300	\$60,000	\$136,700		
TOTAL	\$76,900	\$29,300	\$285,000	\$391,200		
IV. Regional Water Quality Mar	agement					
A. Water Resources and Climate Change	\$20,000 ^c			\$20,000		
GRAND TOTAL	\$746,954	\$465,361	\$1,677,472	\$2,889,787		

Notes:

^a Includes an estimated \$1,300,000 pass-through for diesel retrofits carried forward from FY 2020.

^b Sponsorship for GoRecycle Campaign.

^c By long-standing practice, a portion of the REF is used to support COG's water quality program under COG's Regional Water Quality Management Program.

ANNUAL WORK PROGRAM AND BUDGET DETAILS

Work Program Areas – Detailed Descriptions				
1. Regional Climate and Energy Policy				
FUNDING SOURCES				
PROGRAM AREA	Regional Environmental Fund	COG Member Funds	Grants or Other	Total
Climate and Energy	\$136,354	\$116,429		\$252,783
Committee Oversight:COG Board of DirectorsProgram Managers:Jeff King, Steve WalzStaff Resources:Maia Davis, Leah Boggs, Tim Masters, Katherine Dyer				

Activity Description

The region is addressing the need to reduce energy waste, develop cleaner sources of energy, improve air quality, improve resilience, and meet the challenge of a changing climate by developing policies and programs to mitigate emissions from energy production and use. Staff provides research and technical expertise to assess and develop measures at the local and regional level to reduce energy use, improve energy efficiency and to promote renewable energy.

The Climate and Energy work program will be carried out under the oversight and direction of the Climate, Energy and Environment Policy Committee (CEEPC), supported by the Air and Climate Public Advisory Committee (ACPAC), the Built Environment and Energy Advisory Committee (BEEAC), and other groups as needed. BEEAC will serve as the technical advisory committee to CEEPC and COG staff. ACPAC will advise CEEPC and provide input to the Climate and Energy Action Plan.

Some of the Climate Change Report's recommended actions draw on transportation and emergency management staff at COG in addition to COG Department of Environmental Programs (DEP) staff. This work also will be coordinated with Region Forward through which COG integrates land use, transportation, housing and environmental planning to develop a more prosperous, accessible, sustainable, and livable region (www.regionforward.org).

Outcomes/Major Projects

Policy and Programs

- Identify and recommend state, local, and regional energy and greenhouse policies or programs.
- Identify and advance COG's energy and climate legislative priorities for the year.
- Analyze, track and report on climate change and energy-related legislation, regulations, and programs at the federal, state and local levels.

- Identify and advance strategies to meet the region's greenhouse gas reduction goals.
- Develop and support implementation of regional climate and energy plans for the post 2020 timeframe.

- Update the Climate and Energy Action Plan resource guidance document(s) if needed.
- Advance initiatives in the regional Gold Book and Resource Guide, including continued focus on renewable energy, low emission vehicles, high performance buildings, critical infrastructure, and the energy-water nexus.
- State and local planning and program support and development. Expert consultant support for local climate and resilience planning.
- Track progress, update dashboard, update Region Forward Sustainability Indicators.
- Continued GHG Inventory development support.
- Manage the Climate and Energy Leadership Awards Program.
- Provide regional climate and energy training and capacity building initiatives.
- Support the Climate, Energy and Environment Policy Committee (CEEPC): Identify and present on topics of regional interest at six meetings annually.

Work Program Areas – Detailed Descrip 2. Built Environment and Energy Adviso							
2. Built Environment and Energy Adviso	FUNDING SOUR	059					
PROGRAM AREA	RegionalCOGGrants orEnvironmentalMemberOtherFundFunds						
Climate and Energy	\$121,080	\$101,439 \$222					
Committee Oversight:CEEPCProgram Manager:Leah Boggs, JerStaff Resources:Maia Davis, TirActivity DescriptionAny solution to reduce energy use and environment, which consumes a majoriWashington region. The Built Environmentthe technical committee to CEEPC, provint their efforts to meet work plan goals;practices; and serve as the Regional ErrOutcomes/Major ProjectsPolicy• Identify and recommend state, I	n Masters, Kathe emissions in the r ity of the energy s ent and Energy A vide resources an provide a forum nergency Support	region must ad supplied in the dvisory Commit id direct service for networking t Function #12	metropolitar tee (BEEAC) es to membe and sharing (Energy).	will serve as ers to assist best			
 Implementation Support the Built Environment a annually (including conference of Review and advance policies an Assist in preparation and recom annual work program and budge Assist local governments with de policies/programs. Complete the annual member se Provide information for Action P Conduct annual utility data colles Support the Regional Emergency meetings as required. Coordinate Review and update RESF-12 Plat response. Participate in national or regionate Provide for local program capace 	calls, workshops, d initiatives to CE mendation of the et. evelopment and i urvey of actions b lan progress upda ection and analysi y Support Functions to with UASI. ans, to address er al energy emerge	webinars or too EPC. Regional Envir mplementation being implementation ates. is. on 12 (RESF-12 mergency and o ncy exercises.	urs). ronmental Fu of green bu ited. 2): Subcomm cascading im	und Program iilding ittee ipact			

Work Program Areas – Detailed Descriptions				
3. Energy Infrastructure, Efficiency, and	d Renewables			
	FUNDING SOUR	CES		
PROGRAM AREA	Regional Environmental Fund	COG Member Funds	Grants or Other	Total
Climate and Energy	\$170,900	\$143,003		\$313,903
Committee Oversight:CEEPC, BEEAC, EV Workgroup, RESF-12Program Manager:Jeff King, Leah BoggsStaff Resources:Maia Davis, Tim Masters, Katherine Dyer				
Staff Resources: Mala Davis, Tim Masters, Katherine Dyer Activity Description COG climate and energy program staff will support activities to reduce demand for energy, develop clean, alternative energy sources, and improve energy reliability in both the government and private sectors. COG will partner with industry and other stakeholders to explore new technologies and pilot them in the metropolitan Washington region.				

Outcomes/Major Projects

Policy

 Identify, recommend, and assist in implementation of state, local, and regional energy infrastructure policies or programs, including alternative fuel vehicles, distributed energy, energy efficiency, and renewable energy.

- Enhance regional capacity to implement energy efficiency and renewable energy.
 - o Building Efficiency, PACE Financing and Green Bank Support.
 - o Support Building Code Improvements
 - o Explore Net Zero Opportunities.
 - o Support Solar Market Development.
 - Community Solar Program Support.
 - o Cooperative Solar Procurement, Residential and Commercial Solarize.
 - Facilitate Solar Mapping.
 - o Sector Support for Renewables and Green Power Purchases.
 - Support Green Cooperative Purchasing.
 - Support Community Choice Aggregation.
- Provide analysis tools for development of distributed energy systems.
 - Feasibility study support, Load Data, Modeling, CHP, Geothermal Potential Analysis, Microgrids.
- Alternate Fuel Vehicle Infrastructure.
 - Fleet Grants, Cooperative Procurement, Clean Cities and EV Workgroup.
 - Updated regional EV Plan. Assist local governments with electric vehicle charging station and EV planning.
- Support energy planning for critical infrastructure.
- Support for Smart Region initiatives with the Greater Washington Board of Trade.
- Support capacity building for member staff.
- Match funds for grant-supported initiatives.

 Conduct technical workshops, webinars and meetings. 					
Work Program Areas – Detailed Descriptions					
4. Adaptation and Resiliency					
	FUNDING SOUR	CES			
PROGRAM AREA	Regional Environmental Fund	COG Member Funds	Grants or Other	Total	
Climate and Energy	\$31,085	\$26,790		\$57,875	
Committee Oversight:CEEPC and BEProgram Manager:Steve Walz, KStaff Resources:Maia Davis, Je	atherine Dyer				

Many communities recognize the need to prepare for climate changes and address increasing temperatures, sea level rise, and extreme weather events. COG's climate adaptation and resiliency planning program builds capacity and capability to prepare for climate change by working with regional partners to collect and share climate information and best practices and connect members with resources and trainings.

This work requires coordination with COG water program, transportation, land use, health, and emergency management staff.

Outcomes/Major Projects

Policy

- Monitor and share climate science, impact studies, and regional resiliency efforts.
- Promote economic development opportunities related to sustainability and resiliency.
- Integrate adaptation considerations in infrastructure planning.

- Support regional planning and coordination.
- Support updates to local hazard risk management plans.
- Partnerships (NCPC, NASA, Corps of Engineers, GSA).
 - Coastal Storm Risk Study/Vulnerability Assessments.
 - o Adaptation Studies and Plans.
- Support State and Local Initiatives District of Columbia Climate Initiatives, NVRC Climate Resiliency Team, Maryland Climate Change Commission, Sustainable Maryland
- Provide for capacity building and technical assistance.
 - Networking, Workshops and Training.
 - o Address economic impact of climate change.
 - Assist with incorporating adaptation into infrastructure development.
- Match funds for grant-supported initiatives.

Work Program Areas – Detailed Descriptions				
5. Air and Climate Public Advisory Com	mittee			
FUNDING SOURCES				
PROGRAM AREA	DGRAM AREA Regional COG Grants or Environmental Fund Funds Other Total			
Climate and Energy	\$29,600	\$27,100		\$85,172
Air Quality			\$28,472	
Subtotal	\$29,600	\$27,100	\$28,472	\$85,172
Committee Oversight: CEEPC, MWAQC				

Program Manager: Steve Walz, Leah Boggs

Staff Resources: Maia Davis, Jeff King, Jen Desimone, Sunil Kumar, Tim Masters

Activity Description

The Air and Climate Public Advisory Committee (ACPAC) serves as a forum for the public to advise on air quality, climate and energy issues to COG policy committees. ACPAC advises the Metropolitan Washington Air Quality Committee (MWAQC) on air quality planning and the Climate, Energy and Environment Policy Committee (CEEPC) on climate and energy issues and initiatives.

The Committee initiates discussions of relevant issues, provides input on implementation of CEEPC's Climate and Energy Action Plan, and advises MWAQC by reviewing regional air quality progress, air quality State Implementation Plans (SIPS), and identifying and supporting development of local measures to reduce emissions.

Outcomes/Major Projects

Policy

- Assess potential new energy and emission reduction initiatives in the metropolitan Washington area.
- Support energy efficiency and renewable energy initiatives of CEEPC to achieve the regional GHG reduction goals.
- Provide input and guidance on development and implementation of regional 2030 climate and energy goals.
- Review regional air quality progress and programs, SIPs, and emerging air quality issues.

- Provide advice on the Action Plan to achieve regional GHG reduction goal (post 2020).
- Identify and promote local measures to reduce emissions.
- Manage the Climate and Energy Leadership Awards.
- Support development and implementation of toolkits.
- Support expanded implementation of environmental justice in energy and climate programs.
- Six monthly ACPAC meetings.

Work Program Areas – Detailed Descriptions					
6. Vehicle Emission Reductions					
FUNDING SOURCES					
PROGRAM AREA		Regional Environmental Fund	COG Member Funds	Grants or Other	Total
Climate and Energy		-	-	\$1,300,000	\$1,300,000
Committee Oversight:MWAQC and CEEPCProgram Managers:Jeff King and Leah BoggsStaff Resources:Sunil Kumar, Maia Davis, Tim Masters					

The region is addressing the need to reduce emissions and improve efficiency by implementing projects to convert legacy diesel and gasoline engines operating in on- and non-road fleet equipment in the region. Reduced emissions and improved efficiency are achieved through engine upgrades, engine replacement, exhaust controls, vehicle replacements, and supporting infrastructure deployment. Funding sources include the U.S. Environmental Protection Agency's Region III state and competitive programs under the Diesel Emission Reduction Act (DERA), the U.S. Department of Energy, the VW Mitigation Trust Fund, and others.

Budget includes an estimated \$1.3 million pass-through for diesel retrofits carried forward from FY 2020.

Outcomes/Major Projects

Policy and Program

• Reduced energy use and emissions, and improved efficiency in on- and non-road equipment operating in the region.

- Prepare and manage grants to repower on- and non-road equipment.
- Support cooperative procurement effort for alternate fueled vehicles.
- Support the Greater Washington Regional Clean Cities Coalition, Virginia Clean Cities, and Maryland Clean Cities programs, including serving on the GWRCCC Board.
- Provide fleet analysis to support conversions.
- Support local and regional infrastructure planning and deployment.

Work Program Areas – Detailed Descriptions					
7. COG Board and Member Support/Work Program Development					
FUNDING SOURCES					
PROGRAM AREARegionalCOG EnvironmentalGrants or Member OtherTotal				Total	
Climate and Energy		\$26,035	\$21,300		\$47,335
Committee Oversight:COG Board of DirectorsProgram Manager:Steve Walz, Jeff KingStaff Resources:Maia Davis, Leah Boggs, Katherine Dyer, Tim Masters, John Snarr					
Activity Description	Activity Description				

This task enables COG to fulfill its role as a member service organization by responding to member requests for information on regional programs and policies and serving as a clearinghouse for environmental information. It provides COG staff with the ability to respond to special requests for technical assistance or other support from the COG Board and COG members.

Examples include reporting on the latest regulatory requirements under federal environmental laws or proposed funding strategies at the federal and state level. It also provides funds for staff support in developing environmental resources presentations to the COG Board and other COG committees and COG members.

Outcomes/Major Projects

- Respond to requests and provide briefings and presentations to COG Board and others (4-6 per year).
- Develop and implement the FY 2022 Work Program and Budget.
- Lead implementation of COG Corporate Sustainability Report actions.
- Submit grant proposals (Ongoing).
- Complete performance appraisals.

Work Program Areas – Detailed Descriptions				
8. Regional Solid Waste/Recycling Ma	nagement			
FUNDING SOURCES				
PROGRAM AREA	RegionalCOGGrants orEnvironmentalMemberOtherFundFunds			Total
Regional Solid Waste and Recycling	\$135,000		\$50,000	\$185,000
I-95 Waste Technical Committee			\$14,000	\$14,000
Subtotal \$135,000 \$64,000 \$199				\$199,000
Committee Oversight:CEEPC, Recycling Committee, Solid Waste Managers GroupProgram Manager:John Snarr				

COG provides a forum to address regional waste management issues and coordinates regional initiatives. The Recycling Committee hosts six sessions per year, each on a specific topic. Staff also organizes meetings of the Solid Waste Managers Group and Recycling Markets and Materials Subcommittee each year as needed and holds trainings on topics such as emergency debris disposal. COG produces the I-95 Landfill Committee's quarterly meetings for facility partner governments.

Additionally, COG manages the regional Go Recycle paid media campaign to reinforce the recycling message to residents and businesses. To raise recycling awareness, COG also serves as the regional coordinator for America Recycles Day (ARD). These efforts are an effective way to provide the ongoing consumer education necessary to enhance program efficiency.

Outcomes/Major Projects

- Produce regional Go Recycle promotional campaign for members and sponsors. Solicit external funding and member input to determine campaign direction and outreach techniques.
- Six Recycling Committee technical sessions (bi-monthly).
- Staff solid Waste Managers technical sessions.
- Staff four I-95 Landfill Committee meetings.
- Create additional content for the Go Recycle Web Site to enhance its mission as a regional information resource.
- Coordinate America Recycles Day activities.
- Explore enhanced regional cooperation for solid waste management.
- Participate in regional discussions to expand organic composting infrastructure.

Work Program Areas – Detailed Descriptions					
9. Regional Agriculture and Forestry N	lanagement				
FUNDING SOURCES					
PROGRAM AREA	RegionalCOGGrans orEnvironmentalMemberOtherFundFundsOther			Total	
Regional Agriculture	\$26,500	\$3,000	\$225,000	\$254,500	
Forestry Management	\$50,400	\$26,300	\$60,000	\$136,700	
TOTAL	\$76,900	\$29,300	\$285,000	\$391,200	
Committee Oversight:CEEPC, CBPCProgram Manager:Brian LeCouterStaff Resources:Lindsay Smith	ur , Karl Berger, Heic	li Bonnaffon			

COG provides support for regional environmental programs and projects to strengthen the region's green infrastructure. These programs support regional agriculture and food supply through the Regional Agriculture Workgroup and the National Capital Farms Website to help preserve regional farming activities and related infrastructure, open / green space, support regional forestry through the Community Forestry Network, and help to build connections with regional markets that support sustainable supply in the Washington regional foodshed.

Additionally, this Work Program Area supports regional water quality initiatives focused on climate change that work in conjunction with the green infrastructure initiatives to improve water quality in the region's rivers, streams and lakes.

Outcomes/Major Projects

Support urban forestry

- Community Forestry Network
- Regional Urban Forest Canopy Analysis and Reporting
- Reforestation Projects
- Urban Forestry Grants

Support the region's agriculture

- Washington Regional Agricultural Workgroup
- National Capital Farms.org
- What Our Region Grows Report
- Food Value Chain and Food Systems Initiative