WORK PROGRAM AND BUDGET-DRAFT

Regional Environmental Resources Management

Fiscal Year 2018



TABLE OF CONTENTS

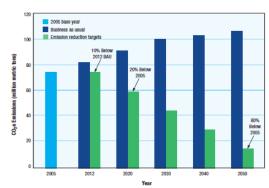
Fur	NDING AND BUDGET Inding Sources Inding Levels, Budgets & Allocations	Page 4 Page 4
	ole 1 – Local Government Contributions to COG's Regional Environmental Fund – FY18	Page 5
rat	ble 2 – Environmental Resources Program Budget Allocations – FY 18	Page 6
AN	NUAL WORK PROGRAM AND BUDGET DETAILS	
1.	Climate and Energy Policy Development	Page 7
2.	Built Environment and Energy Advisory Committee	Page 9
3.	Energy Infrastructure, Efficiency, and Renewables	Page 10
4.	Sustainability and Adaptation Planning	Page 11
5.	Air and Climate Public Advisory Committee	Page 12
6.	Vehicle Emission Reductions	Page 13
7.	COG Board and Member Support/Work Program Development	Page 14
8.	Regional Solid Waste & Recycling Management	Page 15
9	Green Infrastructure & Urban Watershed	Page 16

REGIONAL ENVIRONMENTAL RESOURCES MANAGEMENT

This is the Annual Work Program and Budget document for COG's Regional Environmental Resources Management Programs for Fiscal Year 2018 (FY 2018). The budget is based on the program budget approved by the COG Board in November 2016. 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 was established in 1988 as a complement to the Regional Water Fund to support COG's work on regional environmental resources issues. This 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 Regional Environmental Fund 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 2020, and 80 percent below 2005 by 2050.



For FY 2018, 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. Sustainability and Adaptation;
- 5. Public Advisory Committee (ACPAC);
- 6. Vehicle Emission Reductions:
- 7. Member Support/Environmental Resources Work Program Development;
- 8. Regional Solid Waste & Recycling Management;
- Green Infrastructure & Urban Watershed

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 AND BUDGET

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 2018 (see Table 1, page 5, and outlines how those funds are proposed to be allocated (see Table 2, page 6).

FUNDING SOURCES

Regional Environmental Fund (REF) - Established in 1988, the REF is a voluntary, COG member fee-for-service contribution that supports COG's regional environmental resources programs. By long-standing practice, a portion of the REF is also used to support COG's green infrastructure and urban watershed programs.

The COG Board of Directors adopted its member dues and regional fees in November 2016, and will adopt its FY 2018 Work Program and Budget in June, 2017. The REF is allocated among participating jurisdictions by "Population Adjusted for Budget". See the FY 2018 Member Dues and Regional Fees document for further information on jurisdiction population data. Note: All COG members except the Town of Bladensburg, City of Bowie, 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.

COG Membership Fees and Other - The 22 members of COG pay annual dues at a per capita rate approved by the COG Board of Directors. For FY 2018, the per capita rate is \$ \$0.74, with individual jurisdiction's total cost increases capped at 5%. The Board allocates membership fees to COG programs to support match needed for federal and state grants and to supplement support for programs.

Grants or Other – COG solicits grant funding to supplement the Regional Environmental Program and COG funds. The grants support individual programs and amount of funding vary per year based on availability.

FUNDING LEVELS, BUDGETS & ALLOCATIONS

Table 1 below lists the total COG member funding contributions for COG's Regional Environmental Fund (as approved by the COG Board on November 10, 2016). Table 2 indicates the sources of funds used to support the environmental resources programs.

Table 1 - Local Government Contribution to COG's Regional Environmental Fund - FY 2018				
Jurisdiction	Regional Environmental Fund Allocations			
Alexandria, City of	\$20,167			
Arlington County	\$29,487			
College Park, City of	\$4,142			
District of Columbia	\$92,959			
Fairfax County	\$150,895			
Fairfax, City of	\$3,255			
Falls Church, City of	\$1,830			
Gaithersburg, City of	\$9,083			
Greenbelt, City of	\$2,797			
Loudoun County	\$49,884			
Montgomery County	\$119,129			
Prince George's County	\$104,637			
Prince William County	\$58,523			
Rockville, City of	\$8,980			
Takoma Park, City of	\$2,276			
TOTALS	\$658,044			

COG Regional Environmental Resources Management Programs						
Table 2 - Program Revenue an	d Budget Alloca	tions				
	Revenue Sources					
Program Area	Regional Environment al Fund	COG Member Fees & Funds	Grants or Other	Total Budget		
I. Climate and Energy	<u>.</u>					
A. Climate Policy Development	\$174,514	\$83,579	-	\$258,093		
B. Built Environment and Energy Advisory Committee	\$90,655	\$77,224	-	\$167,879		
C. Energy Infrastructure, Efficiency & Renewables	\$164,344	\$139,997	\$20,000	\$324,341		
D. Sustainability/Adaptation	\$43,495	\$37,052	-	\$80,547		
E. Air and Climate Public Advisory Committee	\$20,193	\$17,202	\$43,667	\$81,062		
F. Vehicle Emission Reductions	-	-	\$60,000a	\$60,000		
G. Management / Member Support	\$24,589	\$20,947	-	\$45,536		
TOTAL	\$517,791	\$376,000	\$123,667	\$1,017,458		
II. Recycling & Solid Waste M	anagement					
A. Recycling & Solid Waste	\$125,000	-	\$35,000b	\$160,000		
B. I-95 Waste Technical Committee	-	-	\$10,700	\$10,700		
TOTAL	\$125,000		\$46,100	\$170,700		
III. Green Infrastructure	III. Green Infrastructure					
A. Green Infrastructure	\$45,250	-		\$45,250		
B. Urban Watershed	\$20,000	=	=	\$20,000		
TOTAL	\$65,250	-	-	\$65,250		
GRAND TOTAL	\$708,041°	\$376,000	\$255,467	\$1,364,508		

Notes:

 ^a Does not include a \$3,900,000 pass-through for diesel retrofits.
 ^b Sponsorship for GoRecycle Campaign.
 ^c Includes estimated \$50,000 carryover from prior year.

ANNUAL WORK PROGRAM AND BUDGET DETAILS

Work Program Areas - Detailed Descriptions					
1. Regional Climate and Energy Policy					
	FUNDING SOUR	CES			
PROGRAM AREA	Regional Environmental Fund	COG Member Fees & Funds	Grants or Other	Total	
Climate and Energy	\$174,514	\$83,579	-	\$258,093	

Committee Oversight: COG Board of Directors Program Managers: Jeff King, Stephen Walz

Staff Resources: Leah Boggs, Maia Davis, Amanda Campbell

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, such as adaptation research, draw on transportation and emergency management staff at COG in addition to COG Department of Environmental Programs (DEP) staff. This work 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.

Implementation

Identify and advance strategies to meet the region's greenhouse gas reduction goals. Implement 2017-2020 Climate and Energy Action Plan.

Update the Climate and Energy Action Plan resource guidance document(s).

Advance initiatives in the regional Gold Book and Resource Guide, including continued focus on the energy-water nexus.

State Plans and Program Development.

Track progress, develop dashboard.

Local GHG Inventories for 2015, analyze drivers of change between regional inventory years. Manage the Climate and Energy Leadership Awards Program.

Provide regional climate and energy training initiatives.

Support the Climate, Energy and Environment Policy Committee (CEEPC): Six meetings annually.

Work Program Areas – Detailed Descriptions					
2. Built Environment and Energy Advisory Committee					
	FUNDING SOURCES				
PROGRAM AREA	Regional Environmental Fund	COG Member Fees & Funds	Grants or Other	Total	
Climate and Energy	\$90,655	\$77,224		\$167,879	

Committee Oversight: CEEPC

Program Manager: Leah Boggs, Jeff King

Staff Resources: Maia Davis, Amanda Campbell

Activity Description

Any solution to reduce energy use and emissions in the region must address the built environment, which consumes a majority of the energy supplied in the metropolitan Washington region. The Built Environment and Energy Advisory Committee (BEEAC) will serve as the technical committee to CEEPC, provide resources and direct services to members to assist in their efforts to meet work plan goals; provide a forum for networking and sharing best practices; and serve as the Regional Emergency Support Function #12 (Energy).

Outcomes/Major Projects

Policy

Identify and recommend state, local, and regional energy policies or programs.

Implementation

Support the Built Environment and Energy Advisory Committee (BEEAC): 11 meetings annually (including conference calls, webinars or tours).

Review and advance policies and initiatives to CEEPC.

Assist in preparation and recommendation of the Regional Environmental Fund Program annual work program and budget.

Facilitate the annual member survey.

Provide information for Action Plan progress updates.

Conduct annual utility data collection and analysis.

Support the Regional Emergency Support Function 12 (RESF-12): Subcommittee meetings as required. Coordinate with UASI.

Review and update RESF-12 Plans, consolidating the multiple regional response plans, to address emergency and cascading impact response.

Participate in national or regional exercises (e.g., GridX, EarthX)

Provide for local program capacity building; networking, workshops, and training.

Work Program Areas – Detailed Descriptions					
3. Energy Infrastructure, Efficiency, and Renewables					
	FUNDING SOURCES				
PROGRAM AREA	Regional Environmental Fund	COG Member Fees & Funds	Grants or Other	Total	
Climate and Energy	\$164,344	\$139,997	\$20,000	\$324,341	

Committee Oversight: CEEPC, BEEAC, EV Workgroup, RESF-12

Program Manager: Jeff King

Staff Resources: Maia Davis, Leah Boggs, Amanda Campbell

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.

Implementation

Implement energy efficiency & renewable energy.

- Building Efficiency, Financing & Green Bank Support.
- Community Solar Program Support.
- Cooperative Solar Procurement, Residential & Commercial Solarize.
- Solar Market Pathways project.
- Examine Solar with Storage.
- Expand Green Cooperative Purchasing.

Provide analysis tools for development of distributed energy systems.

- Feasibility study support, Load Data, Modeling, CHP, Geothermal Potential Analysis. Alternate Fuel Vehicle Infrastructure.
 - Fleet Grants, Clean Cities & EV Workgroup, VW/Electrify America, Others.

Support energy planning for critical infrastructure, energy security and energy assurance planning; Participate in energy emergency and infrastructure protection workgroup meetings. Support capacity building for member staff.

Match funds for grant-supported initiatives.

Conduct workshops, webinars and meetings.

Work Program Areas – Detailed Descriptions					
4. Sustainability and Adaptation					
	FUNDING SOURCES				
PROGRAM AREA	Regional Environmental Fund	COG Member Fees & Funds	Grants or Other	Total	
Climate and Energy	\$43,495	\$37,052		\$80,547	

Committee Oversight: CEEPC and BEEAC

Program Manager: Maia Davis, Amanda Campbell

Staff Resources: Jeff King, Steve Bieber, Tanya Spano, Lana Sindler

Activity Description

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.

Implementation

Support regional planning and coordination.

- Partnerships (NCPC, NASA, Corps of Engineers, GSA).
- Coastal Storm Risk Study/Vulnerability Assessments.
- Adaptation Studies & 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 & technical assistance.

Networking, Workshops & Training.

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 Committee						
	FUNDING SOUR	CES				
PROGRAM AREA	Regional COG Environmental Fund Cog Member Grants or Together Sunds					
Climate and Energy	\$20,193	\$17,202		\$37,395		
Air Quality			\$43,667	\$43,667		
Subtotal				\$81,062		

Committee Oversight: CEEPC, MWAOC

Program Manager: Maia Davis, Amanda Campbell

Staff Resources: Steve Walz, Jeff King, Jen Desimone, Sunil Kumar

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 initiatives in the metropolitan Washington area.

Support energy efficiency and renewable energy initiatives of CEEPC to achieve the regional GHG reduction goal (2020).

Review regional air quality progress and programs, SIPs, and emerging air quality issues.

Implementation

Provide advice on the Action Plan to achieve regional GHG reduction goal (2020).

Identify and promote local measures to reduce emissions.

Manage the Climate and Energy Leadership Awards.

Environmental Justice Toolkit Outreach.

Ten to eleven monthly ACPAC meetings.

Work Program Areas - Detailed Descriptions					
6. Vehicle Emission Reductions					
	FUNDING SOUR	CES			
PROGRAM AREA	Regional Environmental Fund	COG Member Fees & Funds	Grants or Other	Total	
Climate and Energy	-	-	\$60,000	\$60,000	
Committee Oversight NAWAOC and OFFDO					

Committee Oversight: MWAQC and CEEPC
Program Managers: Jeff King and Leah Boggs
Staff Resources: Sunil Kumar, Maia Davis, Intern

Activity Description

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/Electrify America, and Others.

Budget does not include an estimated \$3.9 million pass-through for diesel retrofits.

Outcomes/Major Projects

Policy and Program

Reduced emissions and improved efficiency in on- and non-road equipment operating in the region.

Implementation

Prepare grant proposals to repower non-road equipment.

Support cooperative procurement effort for alternate fueled vehicles.

Provide fleet analysis to support conversions.

Support infrastructure planning and deployment.

Work Program Areas – Detailed Descriptions					
7. COG Board and Member Support/Work Program Development					
	FUNDING SOURCES				
PROGRAM AREA	Regional Environmental Fund	COG Member Fees & Funds	Grants or Other	Total	
Climate and Energy	\$24,589	\$20,947		\$45,536	

Committee Oversight: COG Board of Directors Program Manager: Steve Walz, Jeff King

Staff Resources: Maia Davis, Leah Boggs, Amanda Campbell,

John Snarr, Tanya Spano, Steve Bieber

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, including those program areas not covered elsewhere in the budget. 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. Typical 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.

Provide briefings and presentations to COG Board and others (4-6 per year).

Support the COG Board subcommittee on environmental committee structure.

Develop and implement the FY 2018-19 Work Program and Budget.

COG Corporate Sustainability Report.

Submit grant proposals (Ongoing).

Complete performance appraisals.

Work Program Areas – Detailed Descriptions					
8. Regional Solid Waste/Recycling Management					
FUNDING SOURCES					
PROGRAM AREA	Regional Environmental Fund	COG Member Fees & Funds	Grants or Other	Total	
Regional Solid Waste and Recycling	\$125,000	-	\$35,000	\$160,000	
I-95 Waste Technical Committee		-	\$10,700	\$10,700	
Subtotal	\$125,000	-	\$45,700	\$170,700	

Committee Oversight: CEEPC, Recycling Committee, Solid Waste Managers Group

Program Manager: John Snarr

Activity Description

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 two meetings of the Solid Waste Managers Group each year and holds trainings on 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. Also to raise recycling awareness, COG serves as the regional coordinator for America Recycles Day (ARD). This national celebration of recycling is 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 member input to determine campaign direction and outreach techniques.

Six Recycling Committee technical sessions (bi-monthly).

Staff two 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 backup capacity.

Follow up on recommendations from the Debris Planning Gap Analysis.

Participate in regional discussions to expand organic composting infrastructure.

Work Program Areas – Detailed Descriptions						
9. Green Infrastructure & Urban Watershed						
	FUNDING SOURCES					
PROGRAM AREA	PROGRAM AREA Regional COG Member Fees & Grants or Other Fund Funds Tota					
	\$45,250	\$25,000	\$86,100	\$156,300		

Committee Oversight: CEEPC, CBPC
Program Manager: Brian LeCouteur
Staff Resources: Lindsay Smith

Activity Description

COG provides support for regional programs and projects related to green infrastructure. These programs support regional agriculture through the Regional Agriculture Workgroup and the National Capital Farms website to help preserve regional farms and open space, support regional forestry through the Community Forestry Network, and help build connections with regional markets and sustainable fares in the Washington foodshed. Additionally, this Work Program Area supports urban watershed initiatives 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 Report
- Reforestation
- Urban Forestry Grants

Support the regions agriculture

- Washington Regional Agricultural Workgroup
- National Capital Farms.org
- What Our Region Grows
- Food Value Chain Coordinator