

DRAFT

FY 2016 Environmental Resources Work Program and Budget

July 1, 2015 to June 30, 2016



Metropolitan Washington
Council of Governments

TABLE OF CONTENTS

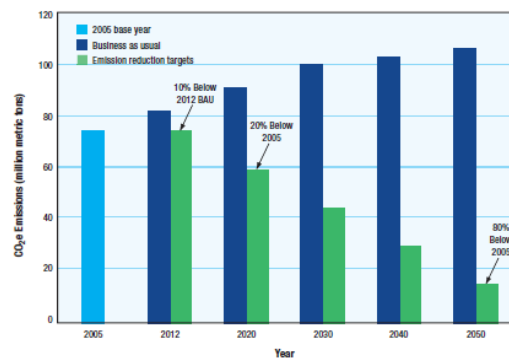
REGIONAL ENVIRONMENTAL RESOURCES MANAGEMENT	Page 2
FUNDING AND BUDGET	Page 3
A. Funding Sources	
B. Funding Levels, Budgets & Allocations	
Table 1 – Local Government Contributions to COG’s Regional Environmental Funds – FY16	Page 4
Table 2 – Environmental Resources Program Budget Allocations – FY 16	Page 5
ANNUAL WORK PROGRAM AND BUDGET DETAILS	Page 6
I.A. Regional Climate and Energy Policy	Page 6
I.B. Built Environment and Energy Advisory Committee	Page 8
I.C. Energy Infrastructure, Efficiency, and Renewables	Page 9
I.D. Sustainability and Adaptation Planning	Page 11
I.E. Air and Climate Public Advisory Committee	Page 12
I.F. Diesel Retrofits and Fleet Conversion	Page 13
I.G. COG Board and Member Support/Work Program Development	Page 14
II. Regional Solid Waste / Recycling Management	Page 15

REGIONAL ENVIRONMENTAL RESOURCES MANAGEMENT

This is the Annual Work Program and Budget document for COG’s Regional Environmental Resources Management Programs for Fiscal Year 2016 (FY 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 includes 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 depending on the needs of COG’s members. Contributions to the Regional Environmental Fund support COG’s environmental resources programs.

The Climate, Energy and Environment Committee (CEEP) was created by the COG Board of Directors in 2009 to plan and implement measures to meet 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 2016, the Environmental Resources section includes nine program areas, reflecting the most important current regional environmental resources issues as defined by the COG Board of Directors and COG’s membership: Climate and Energy Policy Development; Built Environment and Energy Advisory Committee (BEEAC), Energy Infrastructure, Efficiency and Renewables; Sustainability and Adaptation; Public Advisory Committee (ACPAC); Diesel Retrofits; Member Support/Environmental Resources Work Program Development; Recycling & Solid Waste; and the I-95 Waste Technical Committee.

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. Funds also support the Green Infrastructure Program. 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 Membership Fees. In some cases 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 2016 (see **Table 1**, page 4, and outlines how those funds are proposed to be allocated (see **Table 2**, page 5).

A. FUNDING SOURCES

Regional Environmental Fund (REF) - Established in 1988, the REF is a voluntary, COG member fee-for service contribution that helps support 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 FY 2016 Work Program and Budget in January, 2015. The REF is allocated among participating jurisdictions by "Population Adjusted for Budget. See the FY 2016 COG Work Program and Budget document for further information on jurisdiction population data. Note: All COG members except the Town of Bladensburg, City of Bowie, 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 - All 22 members of COG pay an annual fee to be a member of COG. That fee is set using a per capita rate that is applied to each jurisdiction using "population adjusted for budget." For FY 2016, the per capita rate is \$0.71, with individual jurisdiction increases capped at 5%. Additional supplemental funds are to the REF from COG's building and other interest revenue. The Board allocates membership fees to COG programs to support match to federal and state grants, as well as to support specific programs that may have no other source of funding. Regional Environmental Funds are also allocated to complement the Regional Water and Environmental Funds and are allocated to support the Green Infrastructure Program.

Grants or Other – These funding sources recognize that some program areas are heavily dependent on local, state, and federal grants, and that some project work is also supplemented by participants under separate funding formulas to better leverage COG's regional work.

B. 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 January 14, 2014). 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 2016	
Jurisdiction	Regional Environmental Fund Allocations
Alexandria, City of	\$18,819
Arlington County	\$27,798
College Park, City of	\$3,876
District of Columbia	\$85,554
Fairfax County	\$141,681
Fairfax, City of	\$3,051
Falls Church, City of	\$1,695
Gaithersburg, City of	\$8,493
Greenbelt, City of	\$2,665
Loudoun County	\$45,247
Montgomery County	\$111,685
Prince George's County	\$99,784
Prince William County	\$54,038
Rockville, City of	\$8,267
Takoma Park, City of	\$2,130
TOTALS	\$615,783

COG Regional Environmental Resources Management Programs				
Table 2 - Program Revenue and Budget Allocations				
Program Area	Revenue Sources			Total Budget
	Regional Environmental Fund	COG Member Fees & Funds	Grants or Other	
I. Climate and Energy				
A. Climate Policy Development	\$117,919	\$85,150	-	\$203,069
B. Built Environment and Energy Advisory Committee	\$99,370	\$71,757	-	\$171,127
C. Energy Infrastructure, Efficiency & Renewables	\$166,040	\$119,900	\$81,200 ^a	\$367,140
D. Sustainability/Adaptation	\$50,413	\$36,403	-	\$86,816
E. Air and Climate Public Advisory Committee	\$18,135	\$13,096	\$2,000	\$33,231
F. Diesel Retrofits			\$593,500 ^b	\$593,500
G. Management / Member Support	\$26,070	\$18,826	-	\$44,896
TOTAL	\$477,948	\$345,131	\$674,700	\$1,499,779
II. Recycling & Solid Waste Management				
A. Recycling & Solid Waste	\$72,585	\$52,415	35,000 ^c	\$160,000
B. I-95 Waste Technical Committee	-	-	\$11,000	\$11,000
TOTAL	\$72,585	\$52,415	\$46,000	\$171,000
III. Green Infrastructure				
A. Green Infrastructure	\$45,250	-	-	\$45,250
B. Urban Watershed	\$20,000	-	-	\$20,000
TOTAL	\$65,250	-	-	\$65,250
GRAND TOTAL	\$615,783	\$397,546	\$722,700	\$1,736,029

Notes:

- a) Includes \$50,000 pass through for DER-CAM modeling.
- b) Includes \$573,500 pass through for diesel engine repowers.
- c) FY14 carryover for GoRecycle Campaign.

ANNUAL WORK PROGRAM AND BUDGET DETAILS

Work Program Areas – Detailed Descriptions				
I.A. Regional Climate and Energy Policy				
PROGRAM AREA	FUNDING SOURCES			
	Regional Environmental Fund	COG Member Fees & Funds	Grants or Other	Total
Climate and Energy	\$117,919	\$85,150	\$0	\$203,069
Committee Oversight:	COG Board of Directors			
Program Managers:	Stephen Walz, Jeff King			
Staff Resources:	Leah Boggs, Maia Davis, Isabel Ricker, Amanda Campbell			
<i>Activity Description</i>				
<p>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 (CEEP), 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 CEEP and COG staff. ACPAC will advise CEEP and provide input to the Climate and Energy Action Plan. Some of the Climate Change Report’s recommended actions, such as adaptation research, will 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 sustainable communities and a sustainable region for the future (www.regionforward.org).</p>				
<i>Outcomes/Major Projects</i>				
<i>Policy and Programs</i>				
<ul style="list-style-type: none"> • Identify and recommend state, local, and regional 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. 				
<i>Implementation</i>				
<ul style="list-style-type: none"> • Identify and advance strategies to meet the region's greenhouse gas reduction goals • Implement the 2013-2016 Climate and Energy Action Plan • Develop the 2017-2020 Climate and Energy Action Plan • Support and implement recommendations of the multi-sector working group • Regional progress tracking and reporting • Annual Survey of Local Governments • Annual Progress Report on Action Plan • Regional GHG Inventory Updates • GHG Inventory Workshop 				

- Climate and Energy Leadership Awards Program management and recognition
- Regional climate and energy training initiatives
- White House Climate Action Champion program
- Support the Climate, Energy and Environment Policy Committee (CEEPC): Six meetings annually

Work Program Areas – Detailed Descriptions				
I.B. Built Environment and Energy Advisory Committee				
PROGRAM AREA	FUNDING SOURCES			
	Regional Environmental Fund	COG Member Fees & Funds	Grants or Other	Total
Climate and Energy	\$99,370	\$71,757	\$0	\$171,127
Committee Oversight: CEEPC Program Manager: Jeff King, Leah Boggs Staff Resources: Isabel Ricker, Maia Davis, Amanda Campbell				
<p>Activity Description Any solution to reduce 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 focus on serving as the technical committee to CEEPC, providing resources and direct services to members to assist in their efforts to meet work plan goals; providing a forum for networking and sharing best practices; and serving as the Regional Emergency Support Function #12 (Energy).</p> <p>Outcomes/Major Projects <u>Policy</u> Identify and recommend state, local, and regional energy policies or programs.</p> <p><u>Implementation</u></p> <ul style="list-style-type: none"> • Support the Built Environment and Energy Advisory Committee (BEEAC): Eleven meetings annually (including conference calls, webinars or tours) <ul style="list-style-type: none"> ○ Review and advance policies and initiatives to CEEPC ○ Assist in preparation and recommendation of annual work program ○ Facilitate annual member survey ○ Provide information for Annual Progress Report ○ Maintain an up-to-date Resource Guide ○ Conduct annual utility data collection and analysis • Support the Regional Emergency Support Function 12 (RESF-12): Subcommittee meetings as required <ul style="list-style-type: none"> ○ Conduct RESF-12 Plans Review and Update • Provide technical reviews and recommendations for the MSWG 				

Work Program Areas – Detailed Descriptions				
I.C. Energy Infrastructure, Efficiency, and Renewables				
PROGRAM AREA	FUNDING SOURCES			
	Regional Environmental Fund	COG Member Fees & Funds	Grants or Other	Total
Climate and Energy	\$166,040	\$119,900	\$81,200	\$367,140
Committee Oversight: CEEPC, BEEAC, EV Workgroup, RESF-12 Program Manager: Jeff King Staff Resources: Maia Davis, Isabel Ricker, Leah Boggs, Amanda Campbell				
<p>Activity Description Working with CEEPC, BEEAC, and stakeholders, staff will explore opportunities 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 opportunities of implementing them in the metropolitan Washington region.</p> <p>Outcomes/Major Projects</p> <p><u>Policy</u> 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.</p> <p><u>Implementation</u></p> <ul style="list-style-type: none"> • Foster high performance buildings and promote green building policies. <ul style="list-style-type: none"> ○ Promote best practices in building efficiency and energy use monitoring, benchmarking, using online and software tools ○ Foster energy project financing initiatives, including the PACE workgroup ○ Promote and support efficiency investments, including efficient outdoor lighting retrofits • Evaluate and document efficiency and renewable energy program impacts • Pursue and implement programs and projects that improve or enhance energy infrastructure, including microgrids, smartgrid/smart cities, community energy planning, and distributed generation <ul style="list-style-type: none"> ○ Foster use of microgrid planning tools • Promote and support renewable energy deployment (solar, wind, geothermal) <ul style="list-style-type: none"> ○ Coordinate with regional solar energy initiatives, including the Rooftop Solar Challenge and Solar Market Pathways projects ○ Promote regional consistency and adoption of best practices in solar PV permitting, zoning, financing and market development ○ Support outreach and education for residential solar bulk purchasing programs ○ Identify and foster opportunities to further deploy solar energy systems (e.g., Housing Authorities, Commercial sector) • Support energy planning for critical infrastructure, energy security and energy assurance planning <ul style="list-style-type: none"> ○ Participate in energy emergency and infrastructure protection workgroup meetings • Support the Use of Alternative Fueled Vehicles (AFVs) and the Development of Alternative Fuels 				

Infrastructure

- Support the EV Work Group
- Development of cooperative purchase for AFVs and supporting infrastructure
- Promote work place charging
- Promote fleet assessments
- Support COG's green procurement initiatives; Conduct green vendor fair and workshop
- Support capacity building for member staff
- Match funds for grant-supported initiatives
- Conduct workshops, webinars and meetings

Work Program Areas – Detailed Descriptions				
I.D. Sustainability and Adaptation				
PROGRAM AREA	FUNDING SOURCES			
	Regional Environmental Fund	COG Member Fees & Funds	Grants or Other	Total
Climate and Energy	\$50,413	\$36,403	\$0	\$86,816
Committee Oversight: CEEPC Program Manager: Maia Davis, Amanda Campbell Staff Resources: Jeff King, Steve Bieber, Tanya Spano, Lana Sindler				
<p>Activity Description</p> <p>Many communities recognize the need to prepare for climate changes– 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 sharing climate information, share best practices, and connect members with resources and trainings. This work requires cross-coordination with COG water programs as well as drawing on expertise in transportation, land use, health, and emergency management staff.</p> <p>Outcomes/Major Projects</p> <p><u>Policy</u></p> <p>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</p> <p><u>Implementation</u></p> <ul style="list-style-type: none"> • Pursue and implement programs and projects that improve or enhance the region’s ability to prepare for and adapt to climate change • Provide continued outreach and training of decision-makers and stakeholders on climate impacts, vulnerabilities, adaptation measures, and the adaptation planning process • Collaborative resiliency visioning and networking, partnership development • Capacity building for member staff • Training and Leadership Academies • Climate and Economic Development White Paper • Infrastructure inventory development • Tree canopy planning and initiatives • Match funds for grant-supported initiatives • Resilient Communities for America Initiative 				

Work Program Areas – Detailed Descriptions				
I.E. Air and Climate Public Advisory Committee				
PROGRAM AREA	FUNDING SOURCES			
	Regional Environmental Fund	COG Member Fees & Funds	Grants or Other	Total
Climate and Energy	\$18,135	\$13,096	\$2,000	\$33,231
Air Quality	\$0	\$41,000	\$0	\$41,000
Subtotal	\$18,135	\$54,096	\$2,000	\$74,231
Committee Oversight: CEEPC, MWAQC Program Manager: Maia Davis Staff Resources: Jeff King, Jen Desimone, Sunil Kumar, Amanda Campbell, Isabel Ricker				
<p>Activity Description</p> <p>The Air and Climate Public Advisory Committee (ACPAC) advises 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 Advisory Committee gives input to CEEPC’s Climate and Energy Action Plan, a plan developed to reduce regional GHG emissions and meet the regional reduction goal for 2020.</p> <p>The Committee initiates discussions of relevant issues, provides input to CEEPC’s Climate and Energy Action Plan and advises MWAQC by reviewing regional air quality progress, air quality State Implementation Plans (SIPS) and issues.</p> <p>Outcomes/Major Projects</p> <p><u>Policy</u></p> <p>Discuss new energy efficiency and renewable energy initiatives in the metropolitan Washington area. Support energy efficiency and renewable energy initiatives of CEEPC to achieve the regional GHG reduction goal (2020) Reviews regional air quality progress and programs, and reviews SIPs and issues</p> <p><u>Implementation</u></p> <ul style="list-style-type: none"> • Action Plan to achieve regional GHG reduction goal (2020) • Climate and Energy Leadership Awards promotion and judging panel 				

Work Program Areas – Detailed Descriptions				
I.F. Diesel Retrofit and Fleet Conversions				
PROGRAM AREA	FUNDING SOURCES			
	Regional Environmental Fund	COG Member Fees & Funds	Grants or Other	Total
Climate and Energy	\$0	\$0	\$593,500	\$593,500
Committee Oversight: MWAQC and CEEPC Program Managers: Jeff King Staff Resources: Sunil Kumar, Isabel Ricker, Leah Boggs				
<p>Activity Description</p> <p>The region is addressing the need to reduce emissions and improve efficiency by addressing legacy diesel engines operating in on- and non-road fleet equipment in the region. Reduced emissions and improved efficiency is achieved through a variety of means, including engine upgrades, engine replacement, exhaust controls, and vehicle replacements. Funding sources currently include the U.S. Environmental Protection Agency’s Region III state and competitive programs under the Diesel Emission Reduction Act (DERA).</p> <p>Outcomes/Major Projects</p> <p><u>Policy and Programs</u></p> <ul style="list-style-type: none"> Reduced emissions and improved efficiency in on- and non-road equipment operating in the region. <p><u>Implementation</u></p> <ul style="list-style-type: none"> Repowering of one marine passenger vessel operating in Washington, DC and the Potomac River. Repowering a second locomotive switching diesel locomotive operating at Union Station. 				

Work Program Areas – Detailed Descriptions				
I.G. COG Board and Member Support/Work Program Development				
PROGRAM AREA	FUNDING SOURCES			
	Regional Environmental Fund	COG Member Fees & Funds	Grants or Other	Total
Climate and Energy	\$26,070	\$18,826	\$0	\$44,896
Committee Oversight: COG Board of Directors Program Manager: Steve Walz, Jeff King Staff Resources: Maia Davis, Leah Boggs, Isabel Ricker, Amanda Campbell, John Snarr, Tanya Spano, Steve Bieber				
<p>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 for COG staff 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.</p> <p>Outcomes/Major Projects</p> <ul style="list-style-type: none"> • Response to requests (as requested) • Briefings and presentations to COG Board and others (4-6 per year) • Support to COG Board subcommittee on environmental committee structure • FY 2016 Work Program and Budget • Prepare inaugural COG Corporate Sustainability Report • Grant Proposals (Ongoing) • Performance Appraisals 				

Work Program Areas – Detailed Descriptions				
II. Regional Solid Waste/Recycling Management				
PROGRAM AREA	FUNDING SOURCES			
	Regional Environmental Fund	COG Member Fees & Funds	Grants or Other	Total
Regional Solid Waste and Recycling	\$72,585	\$52,415	\$35,000	\$160,000
I-95 Waste Technical Committee	\$0	\$0	\$11,000	\$11,000
Subtotal	\$72,585	\$52,415	\$46,000	\$171,000
Committee Oversight: CEEPC, Recycling Committee, Solid Waste Managers Group				
Program Manager: John Snarr				
Activity Description				
<p>COG provides a forum to address regional waste management issues, including information-sharing about facilities, equipment and techniques to manage the waste stream, and coordination of regional initiatives.</p> <p>COG will participate as co-chair in the Organics Task Force, which will continue to examine how to expand the region’s food waste composting infrastructure. The task force is expanding its meetings to six-times a year at COG’s offices. Staff will organize two meetings of the Solid Waste Managers Group and will manage a homeland security project to better plan and coordinate for emergency debris disposal. The Recycling Committee will continue to host is six sessions per year.</p> <p>Member local governments have asked for COG assistance in coordinating a regional celebration of America Recycles Day (ARD). This national celebration of recycling is an effective way to provide the ongoing consumer education necessary to maintain programs at their current level of efficiency. COG will support this year’s ARD activities by serving as the coordinating agency for the region.</p> <p>The Recycling Committee is working on the regional Go Recycle promotional campaign as a way to reinforce the recycling message, to avoid reduced participation in recycling, and to promote recycling to residents and businesses.</p>				
Outcomes/Major Projects				
<ul style="list-style-type: none"> • Create additional content for the Go Recycle Web Site to enhance its mission as a regional information resource. • Coordinate America Recycles Day activities as state organizer and conduct regional contest for prizes. • Produce regional Go Recycle promotional campaign for members and sponsors. Solicit member input to determine new campaign direction and outreach techniques • Update Construction and Demolition Debris Recycling Guide online • Debris Planning Gap Analysis • Participate in regional Organics Task Force to expand organic composting infrastructure • Six recycling technical sessions (bi-monthly) • Staff two Solid Waste Managers technical sessions 				