COG's Regional Water Quality Management (RWQM) Annual Work Program Elements, Priorities & Levels of Effort – FY 2019

Key features of proposed FY 2019 RWQM Work Program

Overall Focus & Priorities

- Similar drivers, challenges, principles, areas of focus, and level of effort as FY 2017 FY 2018 (see attached graphic).
- COG Board Policy Principles and 2018 Legislative Principles
- High level of activity continues given ongoing Bay TMDL Midpoint Assessment (MPA) process, incorporation of new loads, and development of specific implementation goals/targets by mid-2019 in order to reach Year 2025 targets; and as new water quality/environmental challenges and permit/regulatory issues continue to emerge

Note: Current planning assumptions re: Chesapeake Bay Program (CBP) efforts (as endorsed by the CBPC) are that:

- Water quality obligations driven by the Bay TMDL are codified in permits and other state regulatory requirements and are also drivers for protection of local and Potomac River water quality and water supply protection needs – not just the Bay;
- 2. If there are any changes in federal funding for EPA and/or the Chesapeake Bay Program, the most likely impact would be that the timeline/schedule for implementing those TMDL efforts could be extended but local permit requirements would not; and
- 3. Therefore, there will continue to be a need for analysis and advocacy to protect COG members' interests in these matters.

If any substantive changes do occur that would modify these planning assumptions, COG staff will confer with committee members regarding the implications for this work program.

Regional Water Quality Management

Goal – Continue to protect water quality & public health in a sustainable & affordable manner for the region.

Drivers:

- Continued & evolving permits and other regulatory requirements
- Chesapeake Bay restoration efforts, TMDL Midpoint Assessment, & implementation (2018-2025)
- Local water quality & restoration goals
- Water-related climate change impacts, implementation challenges, sustainability/resiliency needs & associated flood risks
- Growth and its challenges (i.e., load caps, wastewater capacity, local area planning goals, TMDL implementation gaps, etc.)
- Other environmental objectives

Challenges & Priorities

- COG's local governments and water utilities will continue to need to address the following challenges:
 - Maintain existing/aging infrastructure (e.g., asset management)
 - Assess potential of & build/implement new technologies & systems
 - Meet existing/new regulatory requirements, schedules & deadlines
 - Address extreme weather/climate change impacts (e.g., direct & on BMP effectiveness)
 - Respond to emerging issues & meet multiple environmental objectives
 - Prepare to sustain efforts in face of continued growth and TMDL limitations
 - Address overall funding needs in an affordable & sustainable manner
 - Address work force issues

The priority associated with each of these challenges will of course vary, and will depend upon the unique features & circumstances of each jurisdiction and water utility.

OVERALL GOAL

in a Sustainable & Affordable manner for the region (ref. Table 1 & Section I.D) Continue to protect Water Quality & Public Health

DRIVERS

CHALLENGES

GUIDING PRINCIPLES

KEY COG INITIATIVES

Requirements Holistic Regulatory requirements &

environmental objectives

NPDES & MS-IV

Need for sustainable &

affordable solutions

Responsibility

Sound Science

Communication

Maintain existing/aging

infrastructure

Implementation Flexibility & Innovation

Dialogue & Policy Analysis & Use of Strong Technical Sound Science **Partnerships**

Local Interests in Chesapeake Bay **Water Resource** Communicate Advocate for Program

Successes & Challenges

Bay TMDL & WIPs Restoration Goals Local TMDLs & Permits

New/emerging water

resource issues

Environmenta Other Goals Aging/Expanding Infrastructure Water

Workforce Needs Jobs Skills/

and Voice Equitable Changes in funding streams Build new infrastructure & weather/climate impacts

Support for region's

economy

Continued growth

Address aging work force & new job/job skill needs

resources/infrastructure

on water

Address extreme

implement new

technologies

Focus & Priorities in FY 2019 (new/changes noted in blue)

- Increased advocacy, providing local input, outreach and collaboration with other organizations to highlight the accomplishments of and challenges faced by COG's members and water utilities as well as highlighting the associated value/economic benefits as well as the critical funding & work force needs
- Continued assessment/input and advocacy in Bay Restoration efforts, and the critical
 2017 Midpoint Assessment (MPA) process and schedule to address:
 - Progress toward meeting Year 2025 Bay TMDL nutrient/sediment reduction implementation goals;
 - Application of the Phase 6 Watershed Model & tools (i.e., CAST);
 - Development of the next/Phase III Watershed Implementation Plans (WIPs) (by mid-2019), and quantification of local obligations/level of effort (for 2018-2025) based on the Final Phase III WIP Planning Targets (to be issued end-of-May 2018); and
 - Application of EPA's Phase III WIP Expectations Guidance document, as well as the most-recent progress reports, to define the local level of implementation required by the Phase III WIPs
- Continued high level of effort to review/assess technical modeling & monitoring data, science, and related policy principles by which the data is used to address Bay TMDL goals & define local implementation requirements, including:
 - Assessment of science & quantification of climate change impacts, the associated load allocation decisions, and the science of if/how current BMPs can effectively respond to such impacts;
 - Assessing the science & equity in the development of the new Conowingo Dam/Susquehanna WIP loads & allocations;
 - Confirming comparability with local scale water quality monitoring and local data;
 - Continued evaluation of water quality monitoring data for tidal and non-tidal waters, particularly for the Potomac watershed to:
 - Compare to CBP modeled data that is used to assess progress; and
 - Develop/implement agreed upon regional water quality monitoring data program (e.g. Chain Bridge Potomac fall-line data gathered by USGS and OWML and/or other efforts) needed to support local water quality management needs
 - Continued efforts to analyze outputs & ensure accuracy of local data used in various Bay modeling tools (e.g., wastewater/biosolids/septic/combined sewer overflows – both current and historical data) that is used to assess progress/inform implementation requirements
- Continued assessment of key water quality parameters (i.e., nutrients & sediments) as well as water-related cross-media environmental issues to identify common challenges as well as opportunities & potential benefits/synergies of regionally addressing:
 - The CBP's Climate Change & Toxic strategies on wastewater & stormwater permits
 - The water quality & multi-sector links between drinking water/source water protection, harmful algal blooms, climate impacts, tree canopy cover, salt/chlorides, PCBs, and other emerging contaminants

- Continued efforts to assess specific water-related climate change impacts: e.g., Bay versus Potomac versus local water quality implications, BMP effectiveness; groundwater and inflow & infiltration impacts on wastewater and combined sewer systems; and flood risk implications
- Wastewater: Continued focus on assessing the long-term technical & policy challenges and opportunities of maintaining cap loads in face of continued growth – e.g., use of new technologies, reuse challenges, water-energy nexus, trading, climate change impacts/sustainable practices, & assessing how nutrient management regulations will impact biosolids management options, particularly for Class A products
- Stormwater: Continued focus on collaboration and coordination on permitting issues, peer exchange mechanisms and regional procurement opportunities; as well as the challenges associated with funding, implementation and scheduling needed to meet current as well as any additional regulatory requirements
- Continued advocacy to address the critical nature of Water Infrastructure (i.e., in support of COG Board's priorities re: Regional Infrastructure and Economic Competitiveness), including:
 - Increased efforts at broader/integrated outreach efforts re: water sector's accomplishments, issues, challenges, funding needs and opportunities
 - Increased efforts to address the associated value/economic benefits and critical funding & water sector's work force needs that are needed to restore and sustain this Water Infrastructure
 - Recognition of funding and financing challenges and need for innovative financing, affordability and regulatory flexibility (i.e., including trading options & offset policies related to growth), as well as the need for implementation flexibility and innovation
 - Quantifying the water-related impacts/implications for the region of any changes in state/federal funding or programs

RWQM Program Areas – FY 2019

I. Policy and Program Development [Work is fully funded by Regional Water Fund]

Supports policy development, advocacy, CBPC support, program management, and outreach.

- A. CBPC & Board/Member Support
- B. Regional Policy/Legislative Development & Advocacy Efforts
- C. Work Program Management
- II. Water Quality/Water Resources Management and Technical Analysis [Work is fully funded by Regional Water Fund]

Supports technical work for the WRTC on a wide range of water quality/water resource issues.

- A. Regional Water Quality Database & Analysis
- **B. Potomac Water Quality Monitoring Contracts**
- C. Regional Wastewater Flow Forecast Model & WWTP Database & Analysis
- D. Regional Water Resource Infrastructure/Funding Analysis & Work Force Needs
- E. Technical & Program Support to WRTC
- F. Chesapeake Bay Watershed Model & Water Quality Model Work
- **G.** Water Resources Climate Change & Related Assessments
- H. Bay & Local TMDL/WIP/ Local Planning Goals & Permit Support
- **III. Urban Watershed Management Services** [As before, work is fully funded by Regional Environmental Fund & COG Membership fees, and grants]

Supports work to address environmental initiatives with water quality implications/impacts and integrate efforts with other regional initiatives.

- A. Urban Stormwater Regulatory & Program Support
- **B.** Regional Agriculture & Forestry Management
- IV. Water Resources Outreach, and Water Supply & Security [As before, security work is funded separately]

Supports work to address water supply and security issues with water quality/water resource implications and impacts

- A. Community Engagement Campaign
- B. Water Supply Emergency and Drought Management

Regional Water Fund (RWF) Support for RWQM Work Program

FY18 Total RWF (approved) \$1,425,165

FY19 Total RWF (approved by COG Board, 11/8/17) \$1,483,141 (4.07% increase over FY18 funding level)

Allocations to be similar to FY18 (i.e., 80% paid by Blue Plains Parties per Service Agreement (SA) #2; with remaining 20% paid by other jurisdictions/agencies based on percent of adjusted population)

Reference SA #2 - C.4.a.

The Parties agree to pay 80% of the Program based on the following allocation:

- DC Water 20%, on behalf of the District;
- Fairfax 20%; and
- WSSC 40%, on behalf of Montgomery and Prince George's (20% each)