



City of Alexandria

City Council Chambers at
Del Pepper Community
Resource Center
4850 Mark Center Drive
Alexandria, VA 22311

Legislation Text

File #: 19-2177, **Version:** 1

City of Alexandria, Virginia

MEMORANDUM

DATE: SEPTEMBER 18, 2019

TO: THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

FROM: MARK B. JINKS, CITY MANAGER /s/

DOCKET TITLE:

Consideration of a Request to Approve the "Phase 2 Chesapeake Bay Total Maximum Daily Load (TMDL) Action Plan for 40% Compliance" for Submittal to Virginia Department of Environmental Quality.

ISSUE: The City of Alexandria is required to submit the Phase 2 Chesapeake Bay TMDL 40% Action Plan to the Virginia Department of Environmental Quality (VDEQ) by October 1, 2019 to comply with the City's stormwater general permit.

RECOMMENDATION: That City Council:

1. Approve the submission of the Phase 2 Chesapeake Bay TMDL 40% Action Plan; and
2. Authorize the City Manager to execute the necessary documents that may be required.

BACKGROUND: In an effort to clean up the Chesapeake Bay, localities including the City of Alexandria have been given targets for reducing nitrogen, phosphorus and sediment that are enforced through the City's General Virginia Pollution Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) in five-year cycles. In September 2015, City Council approved submission of the City's 5% Action Plan and the City met its initial reduction targets by June 30, 2018.

The City's current 2018 to 2023 MS4 general permit requires the City to develop and implement the "Chesapeake Bay Total Maximum Daily Load (TMDL) Action Plan for 40% Compliance" to meet reduction targets by June 30, 2023. This Phase 2 Action Plan must be submitted to VDEQ by October 1, 2019.

DISCUSSION: The Chesapeake Bay TMDL Action Plan identifies strategies to comply with the MS4 general permit reductions for nitrogen, phosphorus and sediment. The cumulative 40% - or Phase 2 - reduction targets build on the 5% reductions required in Phase 1 and must be achieved by June 30, 2023. Phase 3 requirements

anticipated in the next MS4 general permit will require total reductions of 100% by June 30, 2028. In order to meet the increased reductions in each subsequent Action Plan phase, the City's internal goal is to go above and beyond the mandates. The City achieved 40% of the goal in FY 2018 and 55% in FY 2019, thereby surpassing the 45% Strategic Plan goal set for FY 2022. Given the current pace of projects, the City will achieve at least 70% reductions by the end of Phase 2.

The City's primary strategies to meet and exceed the Phase 2 requirements include:

- Redevelopment projects must implement stormwater best management practices (BMPs) to meet the more stringent City ordinance requirements and reduce pollution in stormwater runoff.
- The Lake Cook regional pond retrofit transformed a fishing pond to a higher-performing stormwater quality BMP, including native plantings, increased fishing opportunities, park benches, a loop path around the lake that includes a walkway and pedestrian bridge, and public art, to create a water quality feature.
- The Ben Brenman regional pond retrofit will enhance pollutant removal efficiencies and direct an additional 30 acres of untreated stormwater runoff to the enhanced pond, while also creating additional public amenities like a new pedestrian bridge in place of the old one and a brand new walkway from peninsula/gazebo area across the pond to the east parking lot.
- Identification of opportunities to install Green Infrastructure BMPs on City property.

Additionally, the City is currently working on multiple urban stream restoration projects following the award of matching Virginia Stormwater Local Assistance Fund (SLAF) grants. These projects are not included in the Phase 2 Action Plan since the regulatory requirement will be met through the above strategies. However, these stream restoration projects will be included in the Phase 3 Bay TMDL Action Plan anticipated for the 2023 to 2028 MS4 general permit to reach 100% pollutant reductions.

The Phase 2 Action Plan includes potential strategies to take advantage of changes in technologies, site conditions, and emerging opportunities that form a comprehensive, "all of the above" approach to maximize benefits and minimize impacts. These strategies include public private partnerships, urban nutrient management, forest buffers/tree planting, nutrient trading, and the application of credits generated through RiverRenew project. AlexRenew and the City of Alexandria are working together on the RiverRenew project to leverage the Water Resource Recovery Facility (WRRF) to achieve CSO control requirements by the 2025 legislative deadline. Integrating these two water quality efforts can create efficiencies for capital investments and facilitate the use of sustainable and comprehensive solutions to minimize the overall additive cost to the City ratepayers that bear sanitary sewer costs to implement the RiverRenew project and the Stormwater Utility fee that funds costly stormwater infrastructure retrofits to meet MS4 permit requirements for the Bay TMDL. This approach will provide water quality benefits to the City's local streams, the Potomac River and the Chesapeake Bay through maximizing the economic benefits to the City's rate payers through the most cost-effective approach.

The draft "Phase 2 Chesapeake Bay TMDL Action Plan for 40% Compliance" was advertised for public comment from July 18 to August 15 and responses submitted during that period were considered and were incorporated into the plan as applicable.

FISCAL IMPACT: As noted above, the City has met and surpassed the initial 5% and 40% goals. Funding currently approved in the FY 2020 to FY 2029 CIP derived from the City's stormwater utility fee revenues as well as State grant revenues will allow the City to achieve at least 70% reduction by the end of Phase 2 (June 30, 2023). No additional funding is contemplated at this time to meet the 40% Action Plan goal.

The \$4.5 million cost for the Lake Cook retrofit was funded in previous CIPs and included a matching Commonwealth of Virginia grant of \$1.5 million. The \$3.75 million cost of the Ben Brenman Pond retrofit was funded through FY 2019 and includes a matching State grant of \$1.8 million. The approved FY 2020 to FY 2029 CIP includes \$3.5 million for the implementation of Green Infrastructure BMPs and approximately \$49 million to retrofit existing facilities or implement new BMPs to address the 100% pollution reduction compliance targets in the City's MS4 general Permit.

ATTACHMENT: Phase 2 Chesapeake Bay Total Maximum Daily Load (TMDL) Action Plan
for 40% Compliance

STAFF:

Emily A. Baker, Deputy City Manager

Yon Lambert, Director, Transportation & Environmental Services (T&ES)

William J. Skrabak, Deputy Director, T&ES, Infrastructure & Environmental Quality (IEQ)

Jesse E. Maines, Division Chief, T&ES, IEQ - Stormwater Management