



CITY OF ALEXANDRIA
Transportation and Environmental
Services

Chesapeake Bay Total Maximum Daily Load (TMDL) Phase 3 Action Plan



Overview



- 1. Background Information**
- 2. FY2024 Compliance Update**
- 3. Permit Requirements & City Reductions**
- 4. Phase 3 Action Plan**
- 5. Recommendations**



Background Information

- ▶ **Chesapeake Bay TMDL** –“pollution diet” – established by the Environmental Protection Agency (EPA) in 2010.
- ▶ **Community Benefits:** Reducing stormwater pollution benefits local waterways, the Potomac River, and the Chesapeake Bay.
- ▶ **History of Compliance:** Phase 1 Action Plan (2013 – 2018) approved January 2016; Phase 2 Action Plan (2018 – 2023) approved July 2021.
- ▶ **Phase 3 Action Plan** (FY2023 – FY2028) for 100% compliance due to Virginia Department of Environmental Quality (VDEQ) Nov. 1, 2024.
 - ▶ Comment solicited, and feedback incorporated.



Background Information

City of Alexandria's
Municipal Separate Storm Sewer System (MS4) Permit
Chesapeake Bay TMDL Pollution Reduction Requirements

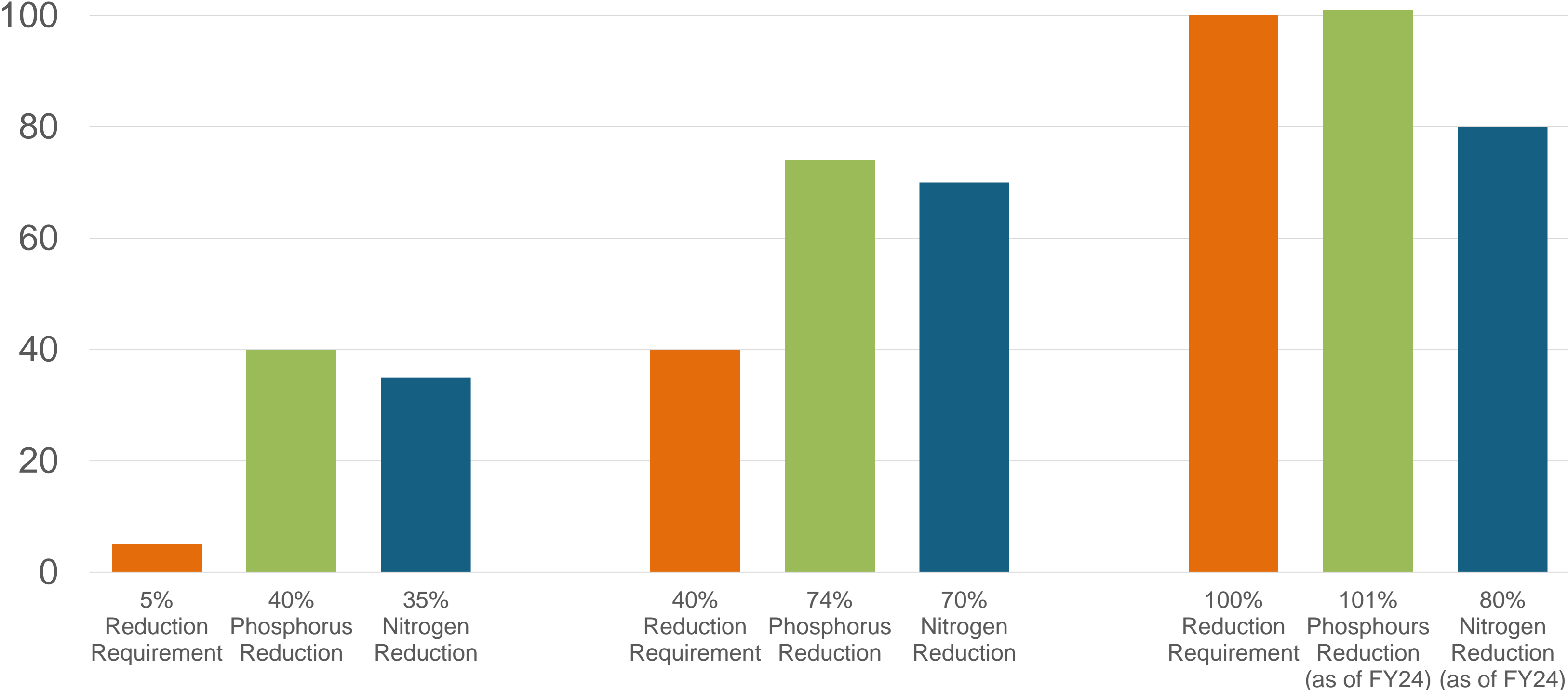
Pollutant	Nitrogen	Phosphorus	Sediment
Required Reduction (lbs/yr)	7,597.03	1,004.40	861,936.64

Three 5-Year MS4 Permit Cycles to Achieve Reductions
(2013 – 2028)



Permit Requirements & City Reductions

Cumulative Progress (%)



Phase 1
2013 - 2018

Phase 2
2018 - 2023

Phase 3
2023 - 2028

Permit Requirements & City Reductions



Phase 1
Lake Cook
Retrofit
2018



Phase 1
Eisenhower
Pond
2015



Phase 1
Four Mile Run
Wetland
Restoration
2016



Phase 1
Windmill Hill
Living
Shoreline
2018



Phase 2
Ben Brenman
Pond Retrofit
2020



Phase 3
Lucky Run
Stream
Restoration
2024



Stormwater Projects

Overview of large stormwater projects which helped the City achieve reductions





Phase 3 Action Plan



▶ Outreach:

- ▶ eNews and Gazette Packet Public Notice.
- ▶ Public comment period August September 2024.
- ▶ Presentation to the Environmental Policy Commission.
- ▶ Feedback incorporated.
- ▶ Phase 3 progress tracked annually with MS4 Annual Report.

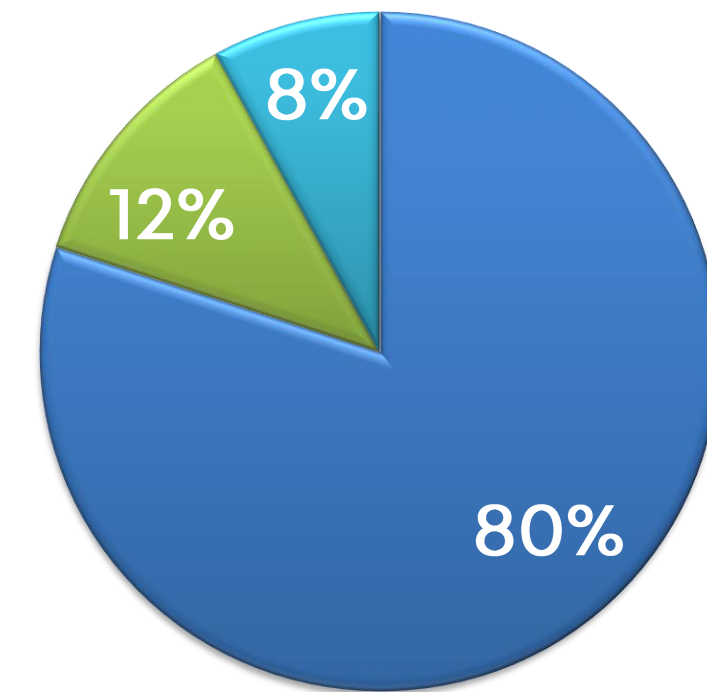
Windmill Hill Living Shoreline



Phase 3 Action Plan

- ▶ Strategies for 100% Compliance by 2028:
 - ▶ Redevelopment SWM Facilities
 - ▶ E.g., Landmark, N. Potomac Yard
 - ▶ Lucky Run Stream Restoration
 - ▶ Green Infrastructure
 - ▶ Outfall Rehabilitation
 - ▶ AlexRenew Nutrient Bi-Lateral Trading

Nitrogen Reduction



- Nitrogen Removed Through FY24
- Nitrogen Removed with Development BMPs (FY25-FY28)*
- Remaining



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Recommendation That City Council:

1. Approve the submission of the Phase 3 Chesapeake Bay TMDL 100% Action Plan; and
2. Authorize the City Manager to execute the necessary documents that may be required.

