The background of the slide features a blue-tinted image of the Chesapeake Bay. In the foreground, a large stone monument with a statue on top is visible on the left. In the middle ground, a large steel truss bridge spans across the water. The sky is overcast.

# Chesapeake Bay Total Maximum Daily Load Action Plan Presentation, Phase II

York County Board of Supervisors  
February 19, 2019

# Chesapeake Bay Total Maximum Daily Loads (TMDL)

The TMDL is the allowable amount of:

- Total Suspended Sediments
- Nitrogen
- Phosphorus

Discharged into the Chesapeake Bay

# TMDL Action Plan

- Required by VADEQ as part of our Municipal Separate Storm Sewer Permit (MS4) for Phase II Communities
- Follows requirements in VADEQ Chesapeake Bay TMDL Guidance Document

# TMDL Action Plan

- TMDL Action Plan Phase I was developed in 2015
- Developed MS4 Service Area
- Calculated Pollutant Loads and Required Reductions
- Evaluated Projects to Achieve 5% of Reductions

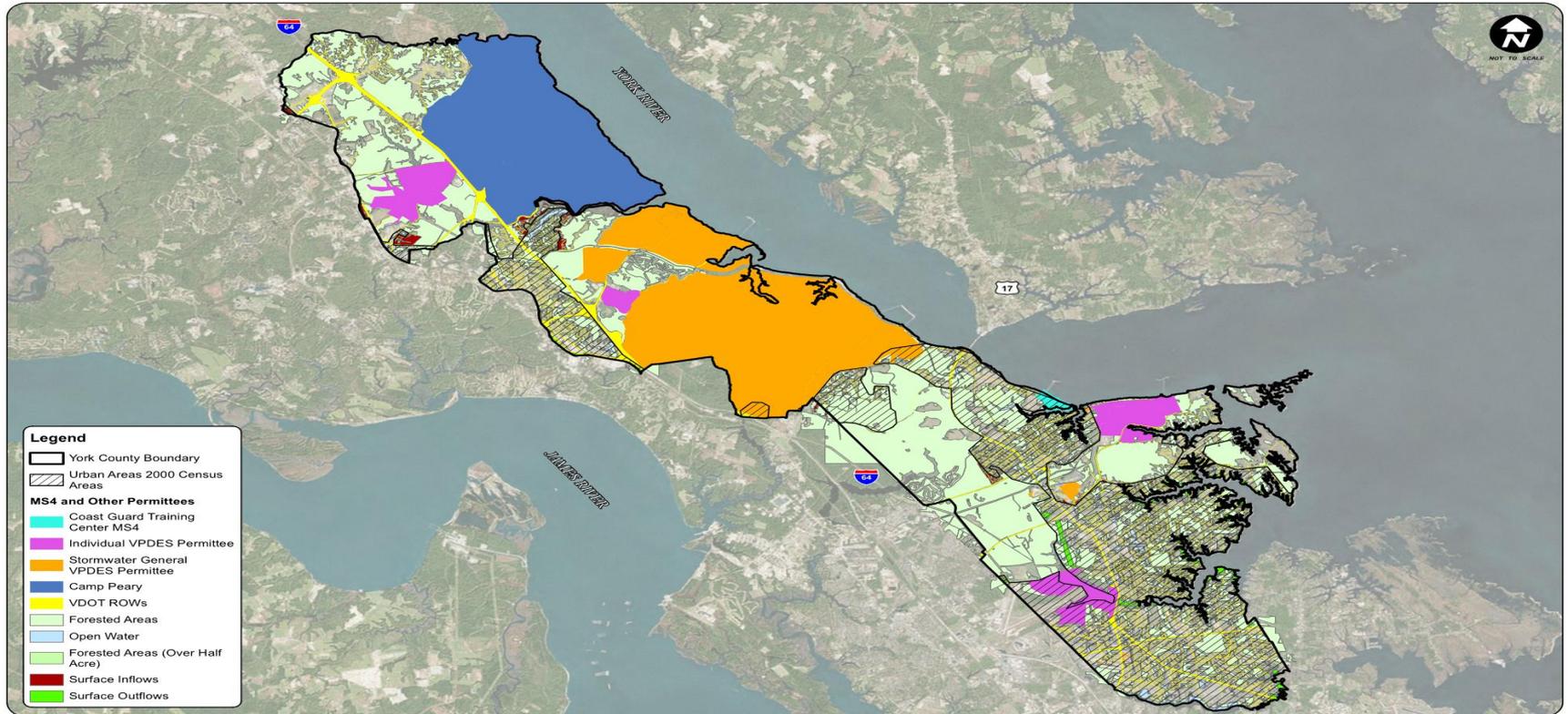
# TMDL Action Plan, Phase II

- Developed Service Area was re-evaluated
- Re-Calculated Pollutant Loads and Required Reductions
- Evaluated Projects to Achieve an additional 35% of Reductions

# MS4 Service Area

- 2000 US Census Urban Areas
- Exemptions
  - VDOT, Camp Peary
  - VPDES Permits
  - Reservoir and Lakes
  - Forests and Wetlands
  - Areas with Surface Runoff
- Service Area Remains Relatively Unchanged

# MS4 Service Area



# TMDL Calculations

- TMDL Loads were recalculated. There was no change from Phase I.
- Loading rates and required reductions specified in the Phase II MS4 Permit
  - 5% of required reduction by July 1, 2018 which has been achieved
  - 35% of required reduction by July 1, 2023
  - 60% of required reduction by July 1, 2028

# TMDL Projects

- York exceeded the required reduction of 5% by 2018 with the following projects:
  - H1 Regional BMP at the Sports Complex
  - Edgehill South Stream Restoration
  - Cook-Falcon Drainage Improvements: Phase I
  - Cook-Falcon Drainage Improvements: Phase II
  - Dare Elementary Stream Restoration & Wetlands
- **Construction Cost \$4 Million**
- **Total Reduction was approximately 25%. Leaving 20% in excess which is applied to the Phase II requirements**

# H1 Regional BMP at the Sports Complex



# Edgehill South Stream Restoration



# Cook-Falcon Drainage Improvements: Phase I



# Cook-Falcon Drainage Improvements: Phase II



# Dare Elementary Stream Restoration & Wetlands



# Sanitary Sewer Projects

- Through existing Sanitary Sewer Projects, York County has achieved all the nitrogen reduction required for 2028.

# Sanitary Sewer Projects

- Future sanitary sewer projects include:
  - National Lane
  - Paynes Road
  - Sinclair Area
  - Schenck Estates
  - Big Bethel Road
  - Whites-Faulkner
  - Burts Road

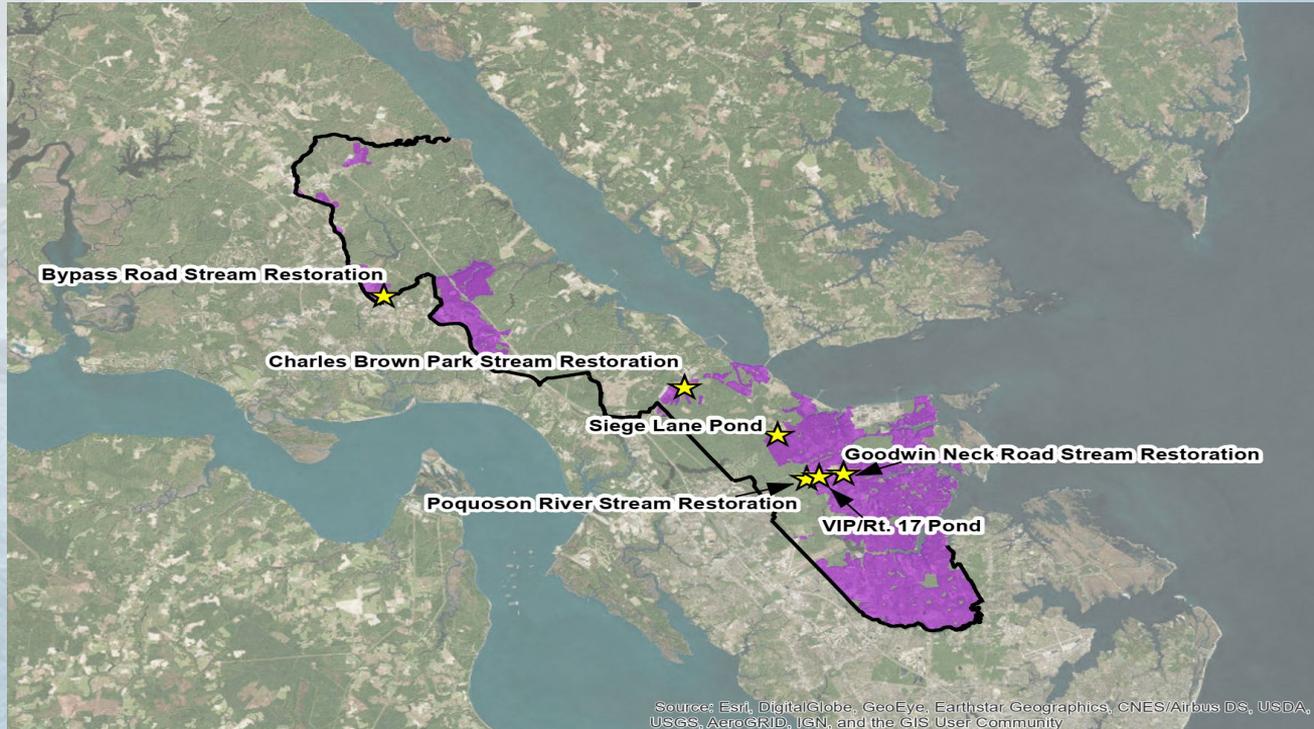
# Phase II Project

York will meet the required reduction of 35% by 2023 with the following projects:

- Siege Lane Pond
- Charles Brown Park Stream Restoration
- Poquoson Headwater Stream Restoration
- Greensprings Stream Restoration
- Goodwin Neck Road Stream Restoration
- Bypass Road Stream Restoration
- VIP/RT17 Pond

Construction Cost \$7 Million

# Phase II Projects Locations



# Project Status

Project	Status	Estimated Construction Start Date	Estimated Construction Cost
Siege Lane Pond	Under Design	2020	\$300,000
Charles Brown Park Stream Restoration	Under Design	2021	\$600,000
Poquoson Headwater Stream Restoration	Under Design	2021	\$1,000,000
Greensprings Stream Restoration	Beginning Construction	2019	\$880,000
Goodwin Neck Road Stream Restoration	Under Design	2020	\$550,000
Bypass Road Stream Restoration	Under Design	2021	\$1,000,000
VIP/RT17 Culvert and Pond	Beginning Construction	2019	\$1,800,000

# Next Permit Cycle 2023-2028

- 60% Reduction will be needed
- New Guidance and Calculations makes the required reductions a moving target

# How to Meet Future Reductions

- Credit from projects in current plan should yield 25% above 35% requirement
- Future projects in CIP
- HRSD Strategic Water Initiative For Tomorrow (SWIFT)

# Lessons Learned

- Property owners do not always want stream restoration projects in their backyards and will be reluctant to accept County offers for easements. Future projects are ranked higher if easements are currently in place or if the County already owns the property.

# York County Phase II Chesapeake Bay TMDL Action Plan

- Questions?