

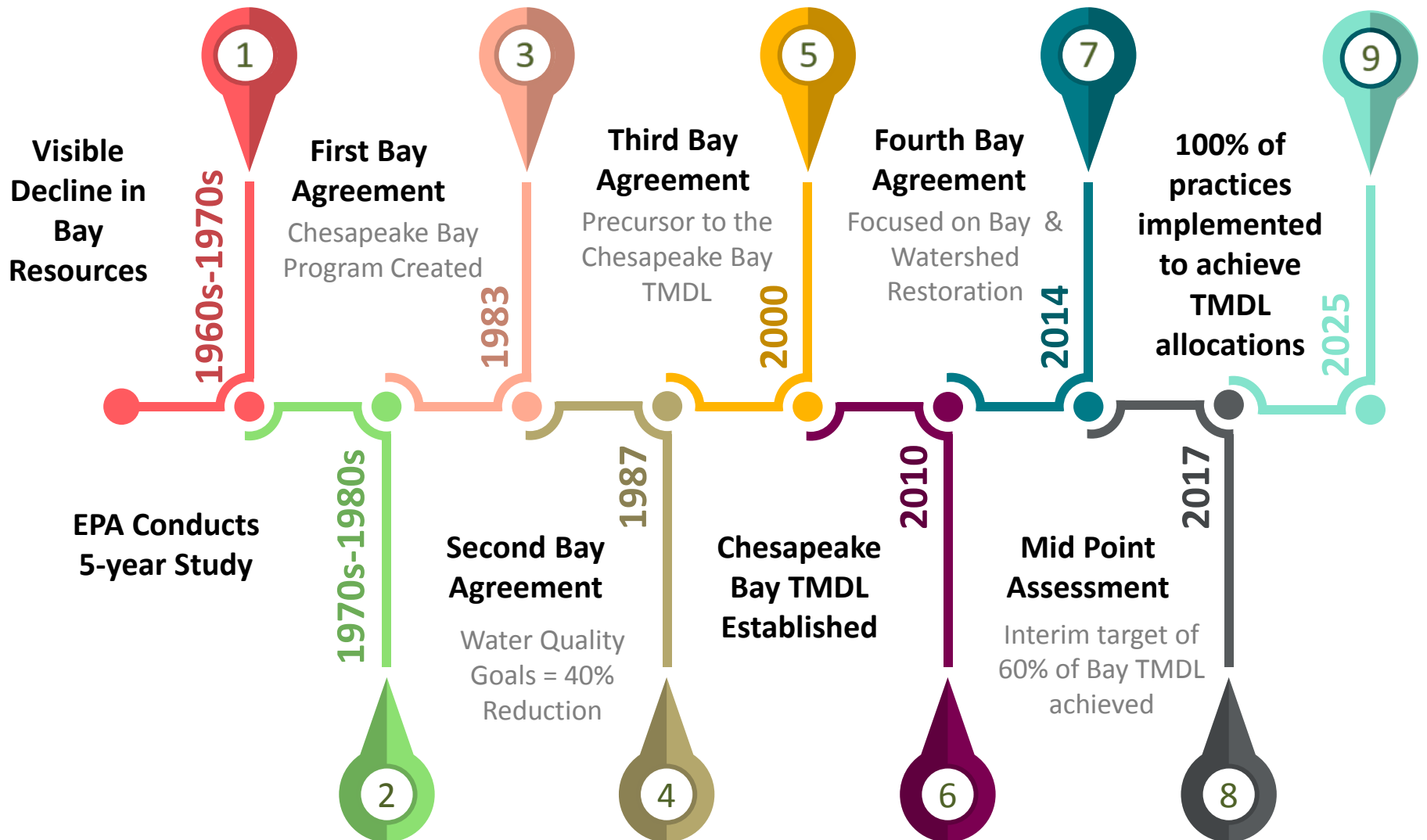
Chesapeake Bay TMDL update

Presented to
HRPDC
November 16, 2017

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Hampton Roads Planning District Commission

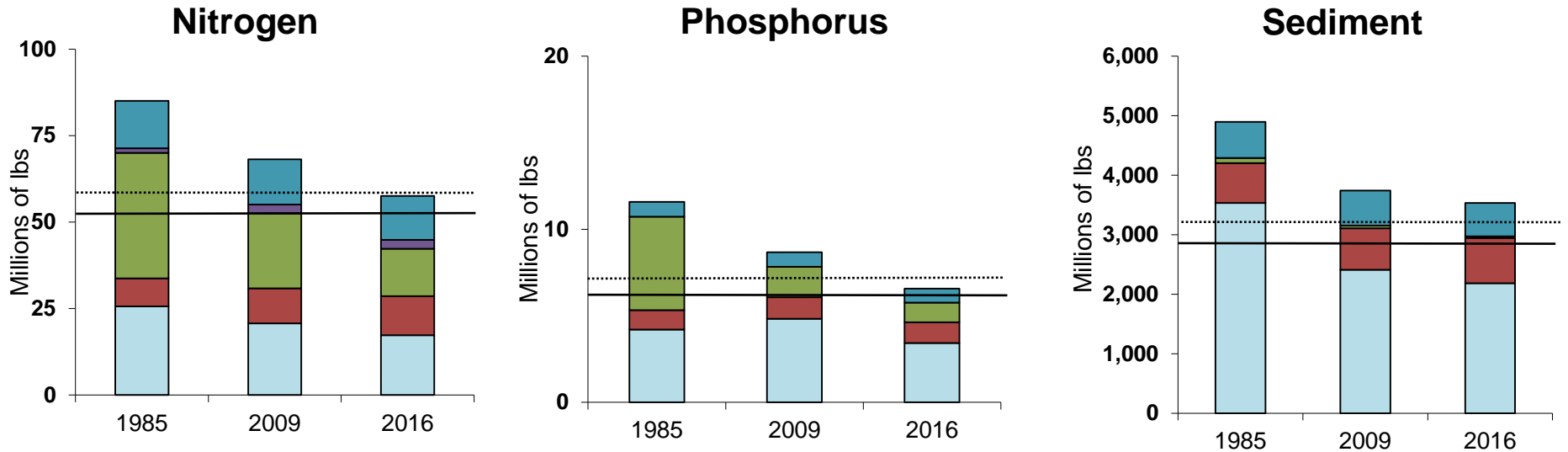


Chesapeake Bay Restoration: 50-year History & Look Forward

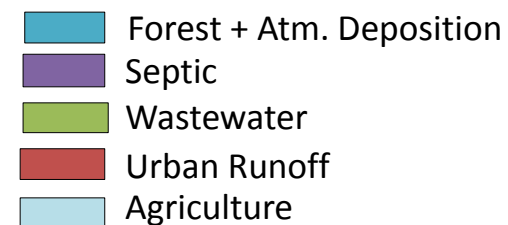


Virginia's Simulated Pollution Loads Delivered to the Bay (million pounds/year)

Midpoint Targets for Nitrogen and Phosphorus are being met



Dash Lines = 2017 Target
 Solid Lines = 2025 Target



Local Government Engagement and Communication during the Chesapeake Bay Midpoint Assessment and Phase III WIP Development (April 2016–June 2019)

2010
Chesapeake Bay TMDL established and Phase I WIPs submitted

2011-2012
Phase II WIPs submitted

April 2016
Phase III WIP development planning begins

January 2017
EPA releases interim Phase III WIP Expectations

December 2016
States report annual BMP progress; Launch BMP Verification Program

Spring 2017
States finalize initial local engagement strategy; Water quality monitoring trends released; Milestone Evaluation complete

June - July 2017
States begin scenario runs

November 2017
Partnership finalizes modeling tools

December 2017
EPA finalizes Phase III WIP Expectations

December 22, 2017
EPA releases draft Phase III WIP planning targets

December 2017
Report annual BMP progress

November-December 2017
States present local engagement strategy to CBP leadership

January 2018
Two-year Milestone Commitments Due; solicit local input September – October 2017

May 2018
EPA finalizes Phase III WIP planning targets

March – April 2018
Midpoint Assessment complete

June - August 2018
States develop local planning goals

February 2019
Draft Phase III WIPs due to EPA

December 2018
States report annual BMP progress; Verification programs in place

June 7, 2019
Final Phase III WIPs due to EPA

2025
100% of practices in place to meet Bay restoration goals set by TMDL

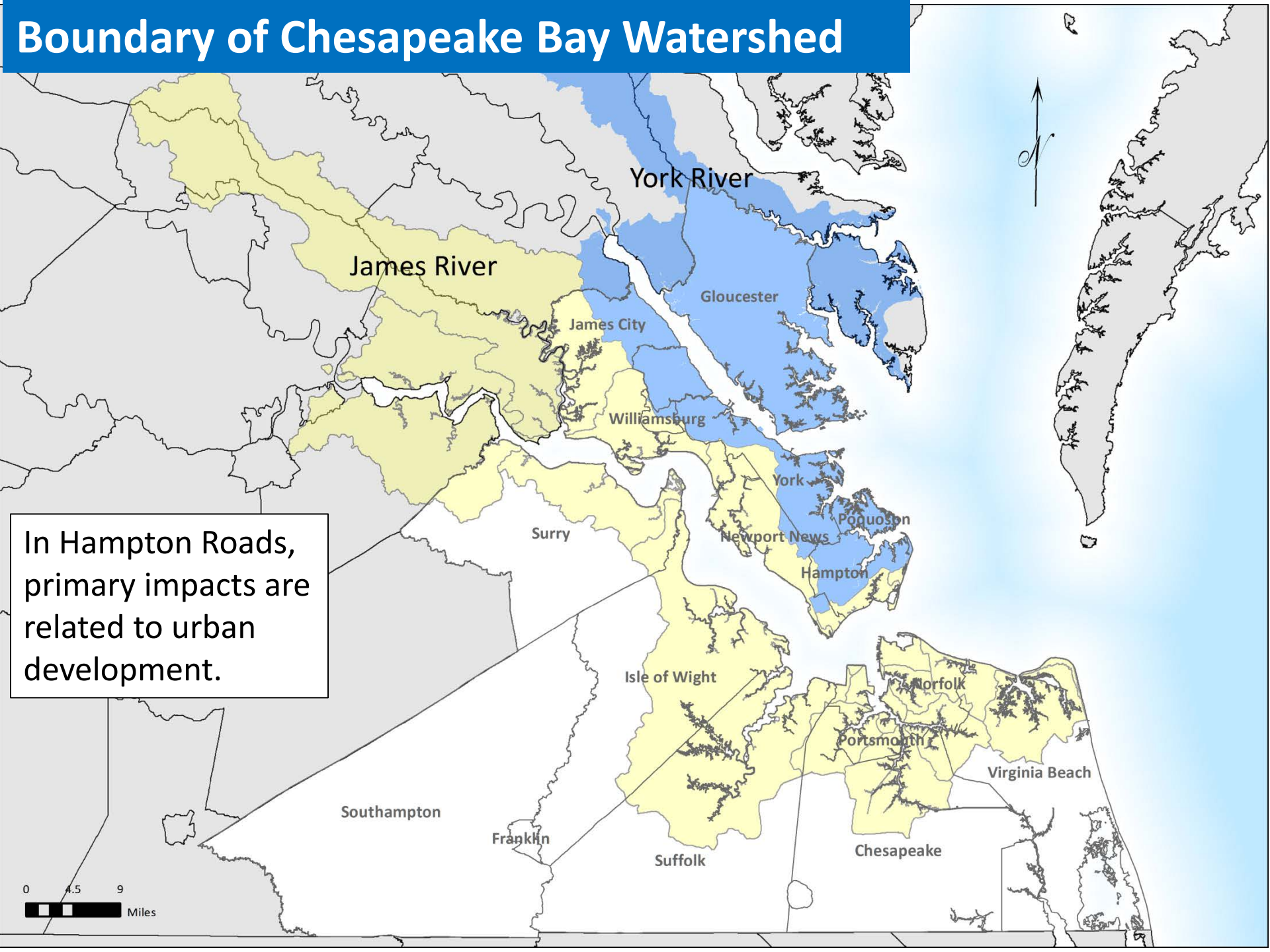
 Key dates in Bay TMDL process

 Key activities or information that needs to be communicated to local governments or others

 Key activities requiring local government engagement

 Guidance for Phase III WIP development released

Boundary of Chesapeake Bay Watershed



In Hampton Roads, primary impacts are related to urban development.



2010: TMDL Established

Two Strategies proposed to reduce Stormwater Loads

Reduce Future Nutrient Loads

- New Development and Redevelopment will increase nutrient loads by creating impervious area & lawns.
- New regulations set criteria to make future development “nutrient neutral”.

Reduce Existing Nutrient Loads

- Impervious areas and lawns already deliver too much nutrients to waterways.
- MS4 permits will require localities to build BMPs that remove nutrients from stormwater before it reaches waterways.

MS4 Retrofits: Rough Cost Estimates

Locality	Total Cost over 15 years	Locality	Total Cost over 15 years
Chesapeake	\$255M	James City County	\$87M
Hampton	\$198M	Poquoson	\$14M
Newport News	\$224M	Suffolk	\$109M
Norfolk	\$280M	Williamsburg	\$18M
Portsmouth	\$125M	York County	\$94M
Virginia Beach	\$323M	Gloucester County	\$33M
Isle of Wight	\$40M	Surry County	\$7M
Hampton Roads	\$1.8B		



2017: TMDL Midpoint

MS4 Permits with Bay Requirements

- New stormwater regulations went into effect and locality ordinances updated to implement.
- New MS4 permits with Bay Requirements issued.
- Stormwater Local Assistance Fund created.

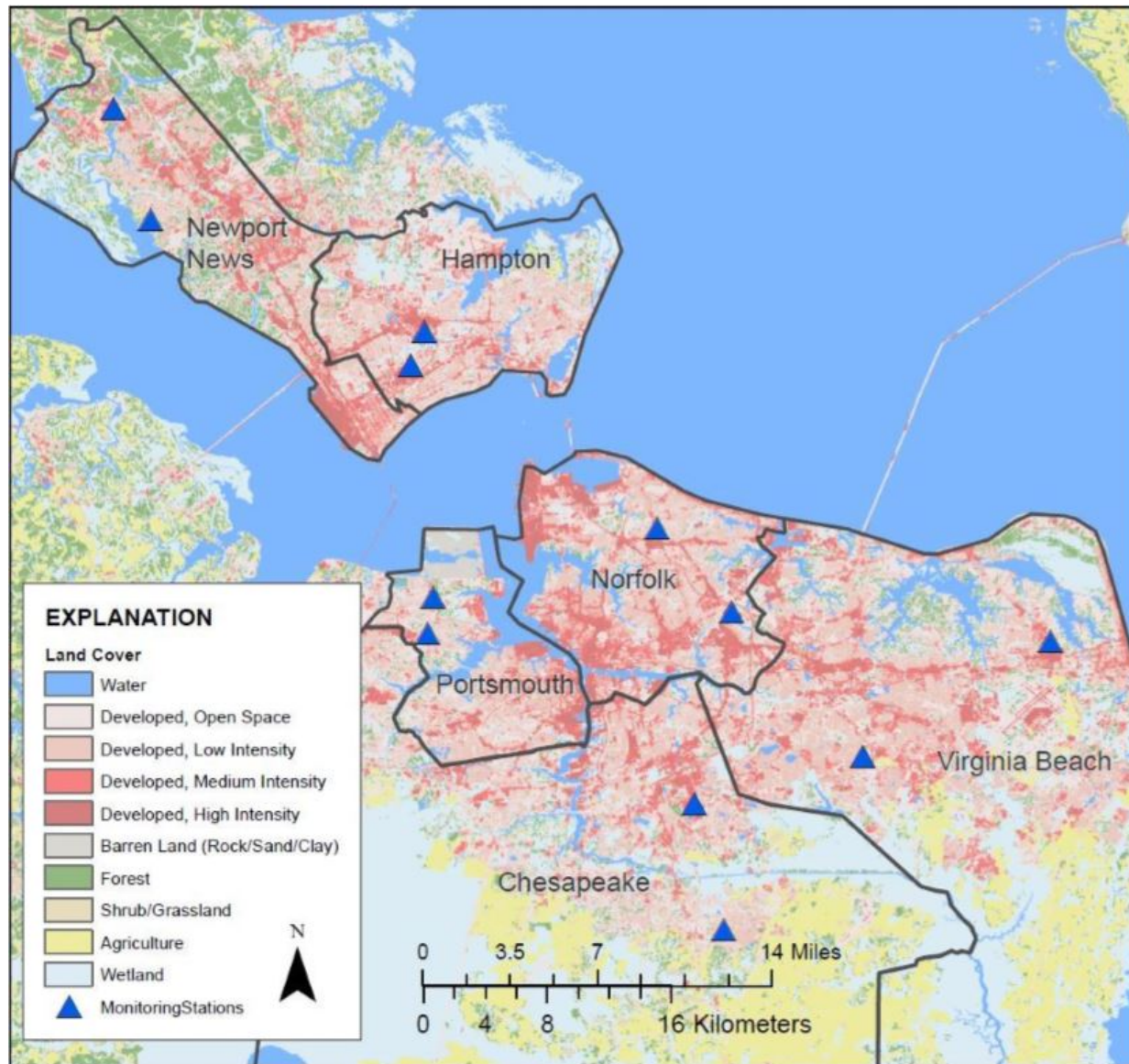


- MS4 retrofit requirements can be met through trading with HRSD.
- Localities signed Memorandums of Understanding providing credits until 2036.
- Localities can pivot to focus on stormwater infrastructure maintenance, flooding and local water quality problems.
- Stormwater fees won't be reduced but avoided the increases required to construct retrofits.

Hampton Roads grants from Stormwater Local Assistance Fund

Year	Number of Projects	Awards (\$M)
FY14	26	\$6.9
FY15	25	\$4.9
FY16	6	\$3.8
FY17	12	\$4.5
Total	69	\$20.1

The Urban Monitoring Network



2025: TMDL Deadline

No Significant Changes Expected

- Virginia DEQ does not intend to revise the stormwater regulations for development or alter the MS4 requirements related to the Chesapeake Bay TMDL.
- However, MS4 permits will be renewed several times before 2025 which creates an opportunity to change locality requirements.

Permittee	1 st Permit Cycle 5% Removal	2 nd Permit Cycle 35% Removal	3 rd Permit Cycle 60% Removal
Phase I MS4s: Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, and Virginia Beach	July 1, 2016 – June 30, 2021	July 1, 2021 – June 30, 2026	July 1, 2026 – June 30, 2031
Phase II MS4s: James City County, Poquoson, Suffolk, Williamsburg, York County	July 1, 2013 – June 30, 2018	July 1, 2018 – June 30, 2023	July 1, 2023 – June 30, 2028

2025: TMDL Deadline

Uncertainty

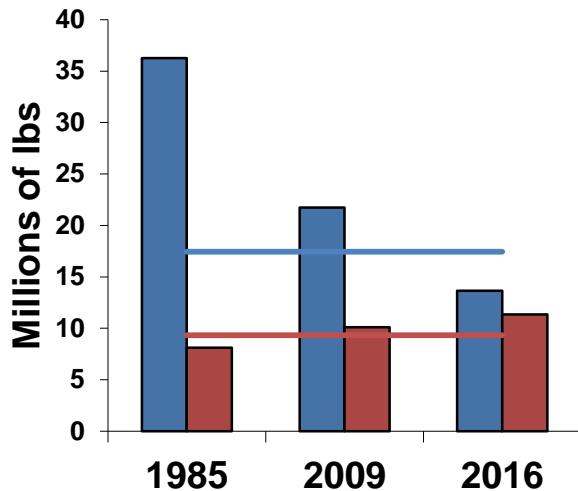
Virginia met the Midpoint Assessment state-wide target:

Success due to Wastewater sector

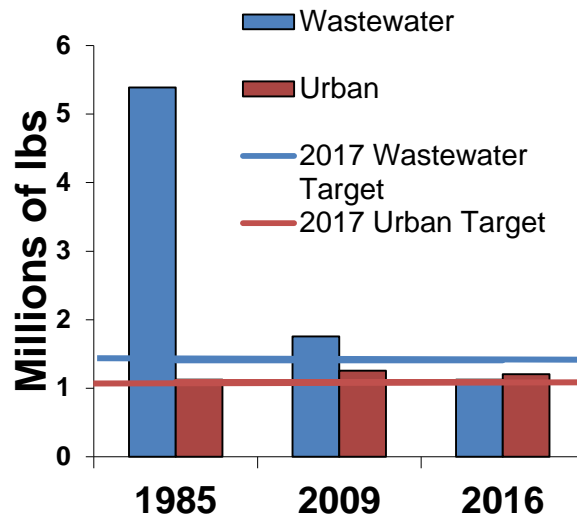
Urban sector did not make targets

No identified plan to bolster the urban sectors load reduction strategies.

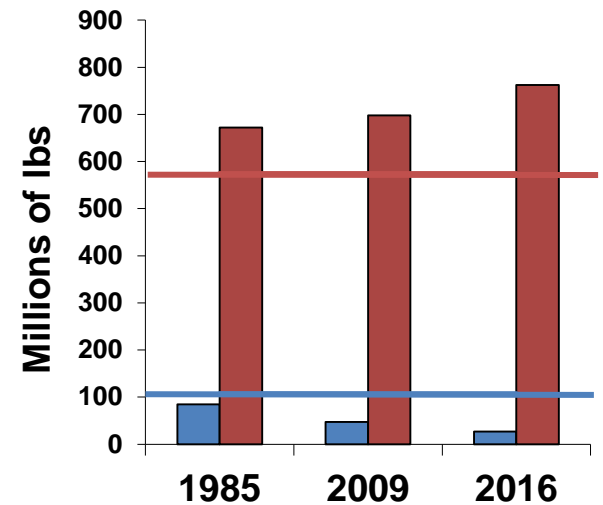
Nitrogen



Phosphorus



Sediment



Local Engagement

- **Update focused on the impacts of the Chesapeake Bay TMDL on localities based on enforceable requirements.**

- **Expect DEQ to ask localities to offer input on the Phase III Watershed Implementation Plan.**
 - **Localities could report retrofits implemented to address local water quality and flooding issues.**
 - **Might promote private property BMPs and retrofits implemented by non-profit watershed groups.**
 - **Offer to promote state cost share program for parcel scale BMPs called Virginia Conservation Assistance Program**