

QUARTERLY PROGRESS MEETING – November 2024
Chesapeake Bay Program



Water Quality Standards Attainment and Monitoring

*Breck Sullivan, USGS, STAR
Coordinator*

Through the Chesapeake Bay Watershed Agreement, the Chesapeake Bay Program has committed to...



Goal: *Water Quality*

Outcome:

Continually improve the capacity to monitor and assess the effects of management actions being undertaken to implement the Bay TMDL and improve water quality. Use the monitoring results to report annually to the public on progress made in attaining established Bay water quality standards and trends in reducing nutrients and sediment in the watershed.



What is our Outlook and Recent Progress?

Recent Progress:
Increase

Outlook: On Course*









RECENT PROGRESS
INCREASE



OUTLOOK
ON COURSE

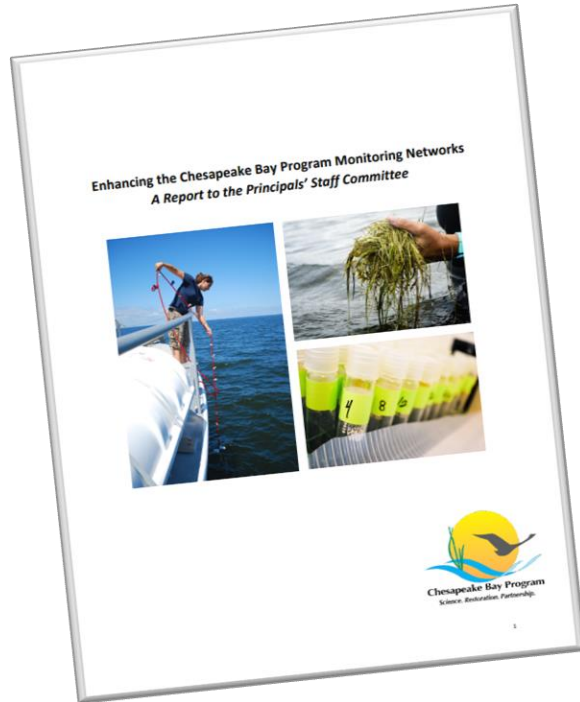


What is our Outlook and Recent Progress?

	Capacity to Monitor	Attainment of Tidal Water Quality Standards	Watershed Response to 2025 WIP	Report Trend Results
Outlook	 OUTLOOK ON COURSE	OUTLOOK MIXED RESULTS	OUTLOOK MIXED RESULTS	 OUTLOOK ON COURSE
Recent Progress	 RECENT PROGRESS INCREASE	 RECENT PROGRESS INCREASE	 RECENT PROGRESS NO CHANGE	 RECENT PROGRESS INCREASE



Capacity to Monitor



OUTLOOK
ON COURSE









RECENT PROGRESS
DECREASE

- Successfully supported **23 out of 31** recommendations
- Majority supported from Infrastructure funding
- We have 1 year window to protect the monitoring



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Attainment of Tidal Water Quality Standards

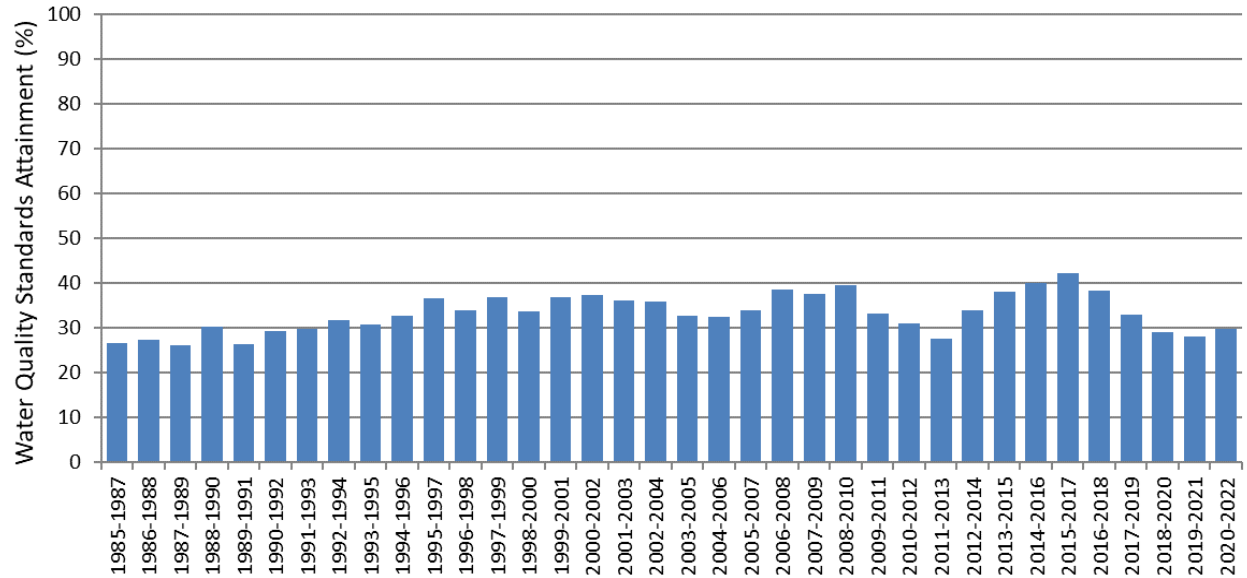
OUTLOOK
MIXED RESULTS



RECENT PROGRESS
INCREASE






- Recent increase from 28.1% to 29.8%

Achievement of Chesapeake Bay Water Quality Standards 1985-2022



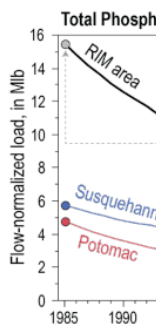
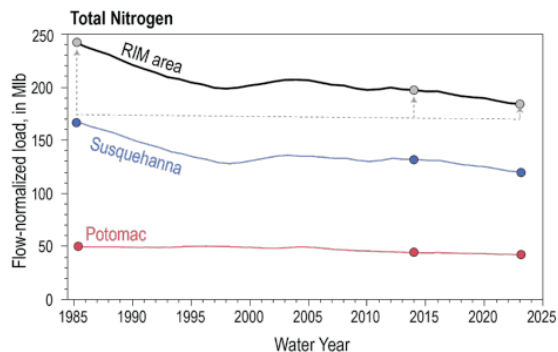


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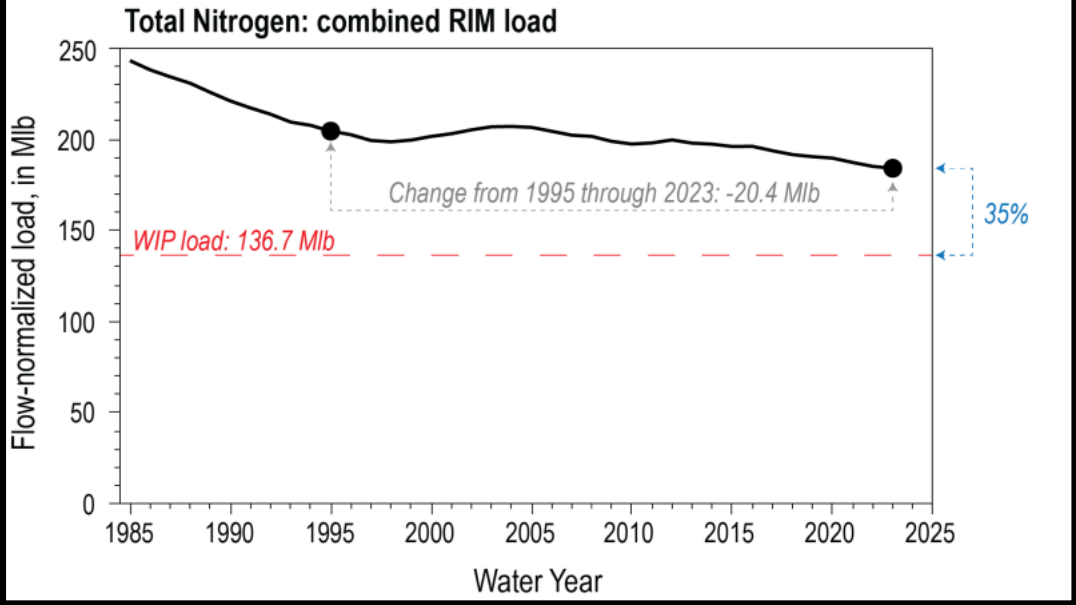
Pollution Loads to the Chesapeake Bay

OUTLOOK
MIXED RESULTS



RIM FN total nitrogen loads
-7% from 2014 – 2023
-24% from 1985 – 2023

In water year 2023, the combined RIM load of total nitrogen exceeded the WIP load by **35%**.





Watershed Response to 2025 WIP

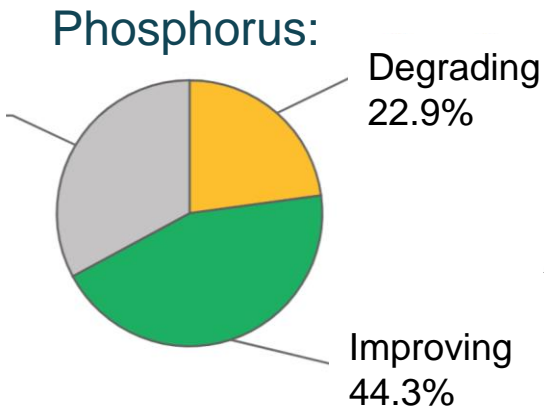
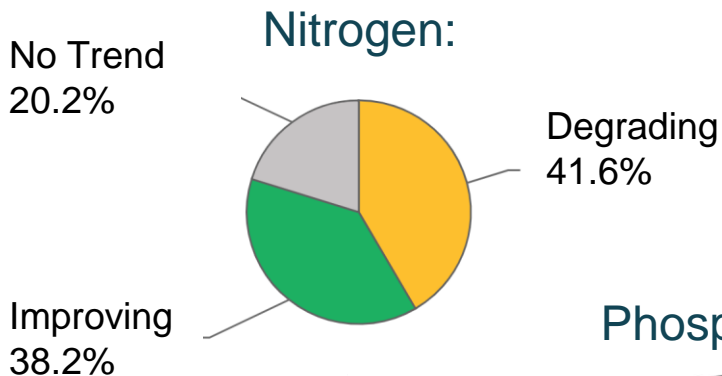
OUTLOOK

MIXED RESULTS



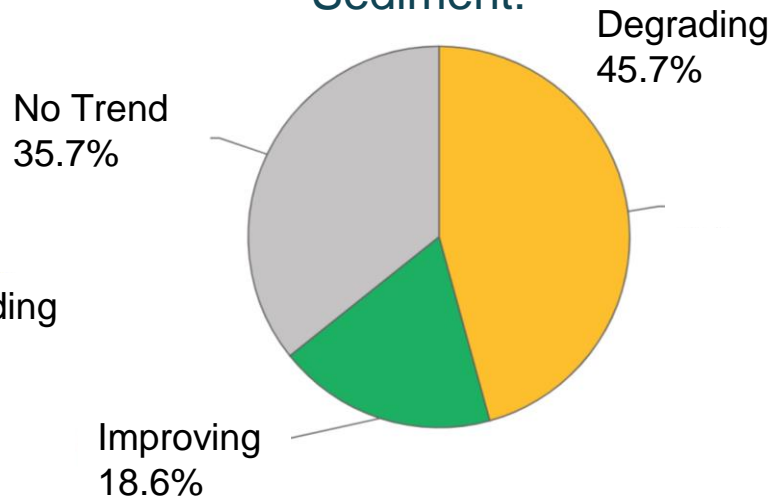
RECENT PROGRESS

NO CHANGE









Short term trend results (2011-2020)

Sediment:





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Report, Analyze and Interpret Trend Results



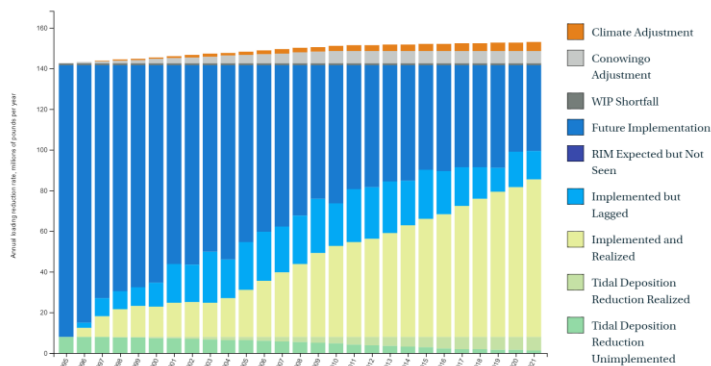
- Indicators
- Publications
- Storymaps
- Trend Reports

TMDL Indicator

Chesapeake Bay TMDL Indicator: Total Nitrogen

This indicator combines monitored and modeled data to estimate the progress of annual pollution loading rate reductions since 1995 in response to implemented management practices.

[VIEW CHART](#) [VIEW TABLE](#)

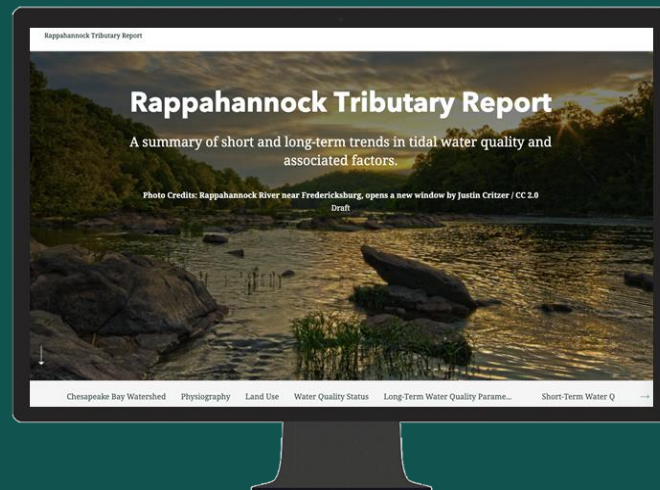


Report Trend Results



- Indicators
- Publications
- Storymaps
- Trend Reports

Tributary Storymaps





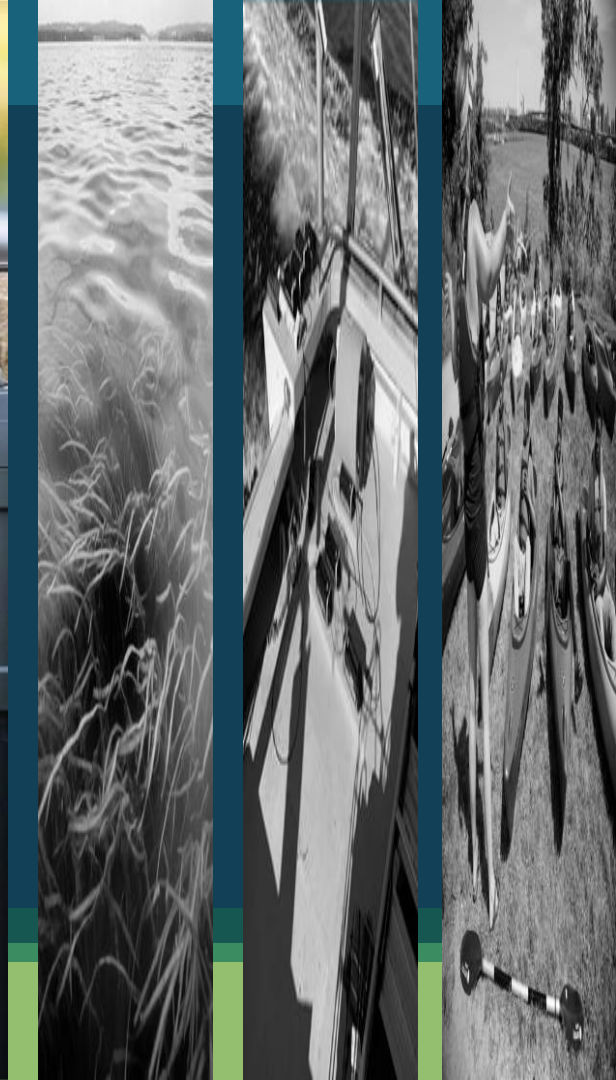
Takeaways

What are the major takeaways of the progress for the outcome?



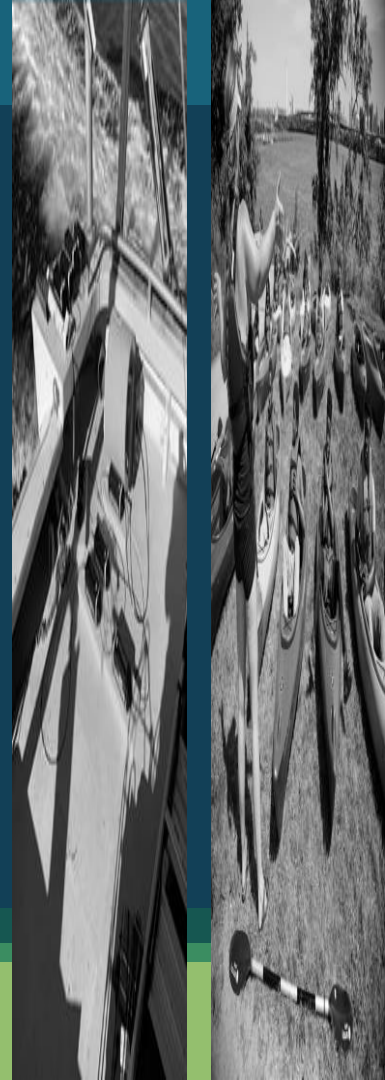


Nontidal Monitoring



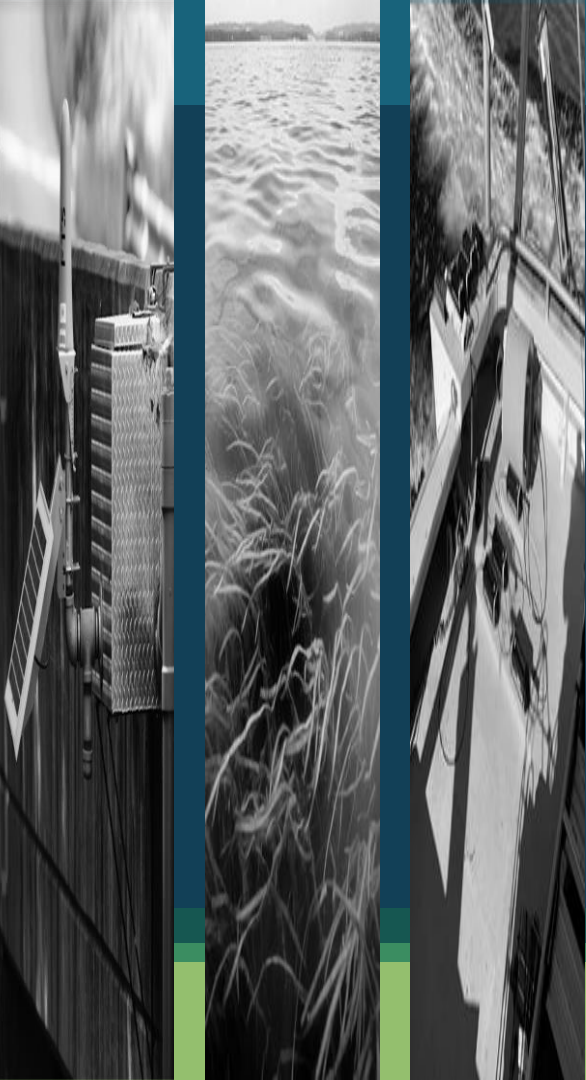


SAV





Tidal Monitoring



Community Science



Challenges: Sustaining Monitoring

- ✓ Enhanced monitoring
- ✓ Infrastructure funding support
- ✓ Time to strategize plan





Challenges: Sustaining Monitoring

- × Lose monitoring capacity and data
- × Fall into separate groups





Challenges: Beyond 2025 – Outcome Language

CONTINUE TO IMPROVE...

STATUS OF WATER QUALITY
STANDARDS...

MULTIPLE COMPONENTS WITHIN
OUTCOME...





Challenges: Beyond 2025 – Outcome Language

In conjunction with Beyond 2025 efforts, the team wants to revise the WQSAM Outcome language to better track progress in monitoring and assessment.



Discussion



Takeaway #1

- Prioritize developing a funding strategy to sustain monitoring

Takeaway #2

- Revise WQSAM Outcome as a SMART outcome to better track progress which we will bring back to MB

ChesapeakeProgress Icons



RECENT PROGRESS
INCREASE



RECENT PROGRESS
DECREASE



RECENT PROGRESS
NO CHANGE



RECENT PROGRESS
COMPLETED



OUTLOOK
ON COURSE



OUTLOOK
OFF COURSE



OUTLOOK
UNCERTAIN



OUTLOOK
COMPLETED

Monitoring Funding Levels

Monitoring Funding Levels FY20-FY29:
All Recipients/Projects

