Improving Chesapeake Bay **Program Monitoring Networks**



Principals' Staff Committee Meeting: July 21st, 2023

Update on monitoring networks covered in "Enhancing the Chesapeake Bay Program Monitoring Networks" Report

Tidal

Three multi-sensor vertical water quality monitoring arrays are deployed to monitor hypoxia with data reported every 10 minutes. Exploratory data analysis in progress. Funding: NOAA & EPA; Operations: NOAA



Deployments of ten multisensor vertical water quality arrays to monitor hypoxia planned by 2025.



4-Dimensional (4-D) Interpolator development on schedule for 2026-27 launch. Development by Bay Oxygen Research Group (BORG).



2-year Nutrient Limitation Study underway. Funding: EPA Grantee: UMCES

Nontidal

ontinuous Monitors (Con-Mons) at **River Input Monitoring stations** operating (Choptank, Mattaponi, Appomattox, and Rappahannock; Patuxent @ Bowie: pending)

Small agricultural watershed monitoring, 5 sites. Funding: EPA, USGS, & NRCS. In talks with states for operations & maintenance. **Future: Additional Funds**



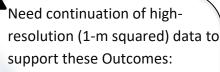
Integration of discrete and continuous data with loads and trends calculations in development by USGS.

Community Science



Funding distributed in FY24: EPA. New group approved for Tier 3 Monitoring: Anne Arundel Rivers Federation.

Land Use



- Tree Canopy
- Forest Buffers
- Protected Lands
- Land Use Methods and Metrics
- Land Use Options Evaluation
- Public Access

Submerged Aquatic Vegetation



Advanced monitoring RFA for Satellite based assessment methods, summer 2023. Funding: EPA.

Toxics



PFAS: Researcher tackling questions from STAC PFAS Workshop. Funding: USGS

Other Monitoring Updates:

Stream Health

Workshop being planned to identify priority monitoring needs, identify permanent vs ephemeral water flow, & help target locations for riparian buffers. Funding: USGS with CESU

Climate



Sea Level Rise Indicator in development by Climate Resiliency Workgroup.

Forest Buffers



State of the Chesapeake Forests report Phase 1 update complete using high-resolution (1-m squared) data.

Photo Credits: Will Parsons (CBP)