Recommendations on sampling design for the next phase of hypoxia monitoring network development

n=11 arrays.

- Mainstem bay (3)
  - if we keep an east-west pair in the mainstem and
  - we have a reference array at another latitude
- Lower tributaries: Potomac and Rappahannock. (4)
  - 2 Potomac arrays
  - 2 Rappahannock arrays
- Mobile, targeted study arrays (4)
  - 3 new as a suite for evaluating scales of variability
  - 1 existing with MD DNR and their Fishing Bay study area

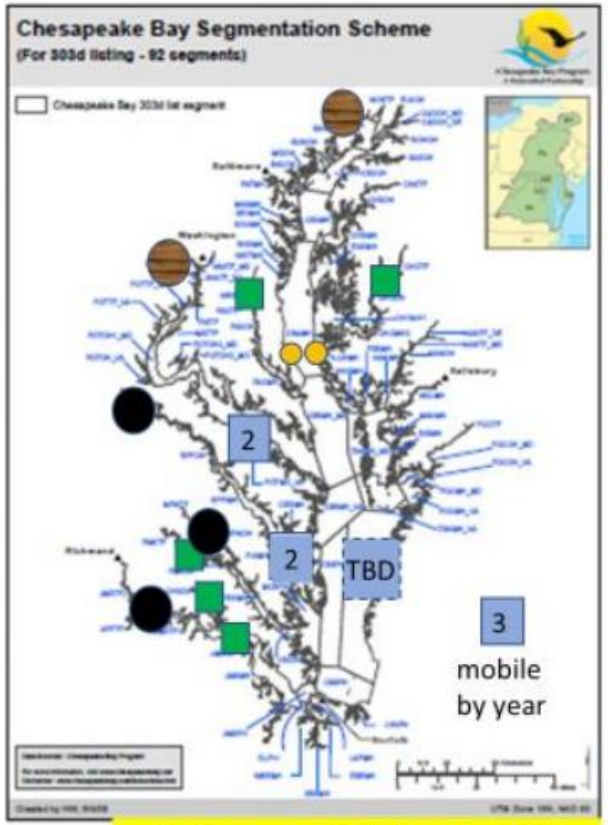
- Growing the water quality network from "Fair" to "good", addressing high frequency water quality habitat conditions with this level of investment and build out of the program.
- **Recommendation for investment to PSC is targeting support for 8 new locations for arrays.**

Recommendations on sampling design for the next phase of hypoxia monitoring network development

Expanding monitoring and assessment capacity 2021+: High frequency monitoring network

Existing

- NOAA supports 2 vertical sensor arrays
- 3 fully funded river input water quality continuous monitors (VADEQ/USGS)
- 2 river input water quality continuous monitoring sites with support ending, need funding (MD/USGS)



Draft: Hypoxia Collaborative 2022

Network vision: D.O., Temp, Salinity

- 11 vertical arrays operating in main bay and tidal tributaries
- 10 boundary condition river input continuous monitoring stations
- Sustain existing long-term and targeted shallow water monitoring