CMC
Chesapeake Monitoring
Cooperative

DIWG MEETING - CMC BACTERIA MONITORING

March 18, 2024

Photo by Chesapeake Bay Program

BACTERIA MONITORING

IDEXX systems have been used by labs for a long time - they are reasonably priced, easy to set up, provide quick turnaround times for data, and produce replicable data.

Tier 1	Tier 2 (Lab Analysis)
• Coliscan Easygel • R-card	• IDEXX Colilert/Enterolert • Membrane Filtration

CMC TIER REQUIREMENTS

Tier 1

- Monitoring Program - Methods Manual

Tier 2

- Monitoring Program – program manual or approved QAPP

- Lab – State or EPA approved QAPP

Tidal Tier 3
(TN, TP, Chl a)

- Monitoring Program – CBP/EPA approved QAPP and CBP DIWG Field Audit

- Lab – Certified (VELAP/NELAP) or CBP Approved*

*CBP approved labs participate in the split sample, blind audit, and USGS reference sample through the DIWG.

NON-TIDAL TIER 3

Data User - State Integrated Reports
- Parameters used varies by state - Data Uses
- Conductivity, dissolved oxygen, water temperature, pH and bacteria seem most viable.

Monitoring Program Requirements:
- Approved QAPP - CBP/EPA or **State**
- Field Audit (field and lab parameters) - **Varies by state**

Lab Requirements:
- VELAP/NELAP Certification or **State approval**

BACTERIA TIER 3 DATA USES BY MONITORING GROUPS

1. Data credibility when engaging and educating the public about water quality issues and recreational decisions.
2. Lawsuits and identifying permit issues/violations.
3. Helps secure funding opportunities.
4. Regulatory decision making - listing and delisting waterways.

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Tier 1

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Tier 2

- Monitoring Program – program manual or approved QAPP

- Lab – State or EPA approved QAPP

Tier 3

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STATE REQUIREMENTS

Virginia
- DEQ approved QAPP
- DEQ conducts a field and lab audit
- Level 3 – VA Integrated Report

District of Columbia
- DOEE approved QAPP
- DOEE conducts a lab audit
- Public education and outreach
- DC Integrated Report – unclear use

Maryland
- CBP approved QAPP
- MDE conducts a field and lab audit
- Tier 3 – MD Integrated Report