

## CWGT Proposed Structure: Workgroup & Action Team Descriptions

Prepared for the Clean Water Goal Team by CWGT Leadership and Staffers, Breck Sullivan (USGS-CBPO), Peter Tango (USGS-CBPO), and Kaylyn Gootman (EPA-CBPO) .

### **Proposed Groups for Water Quality, Standards Attainment and Monitoring (WQSAM)**

#### Outcome Language:

Measure changing water quality conditions by maintaining monitoring networks and tracking our collective progress toward achieving clean water throughout Chesapeake Bay and its watershed.

- Maintain full core monitoring network operations (i.e., nontidal water quality, SAV, tidal water quality, benthic and community science) annually to support analysis and communication of water quality loads, trends and criteria attainment.
- Develop and expand partnership-approved approaches for assessing whether water quality criteria are being met for all designated uses. For dissolved oxygen criteria, establish an approved method by 2028 and apply the method for data analysis and reporting by the end of 2030.
- Maintain or exceed the rate of improvement in the water quality standards attainment indicator relative to the 1985-2022 baseline.
- Analyze and report status/loads, trends and factors affecting those trends for nontidal and tidal water quality.

#### Proposed Workgroups and Action Teams:

1. Monitoring Workgroup
2. Data, Analysis, and Reporting Workgroup
3. Criteria Assessment Protocol
4. Bay Oxygen Research Group

## Monitoring Workgroup (Tidal & Non-Tidal)

#### Functions:

Long-term water quality monitoring of Chesapeake Bay and watershed is essential to understanding state of the ecosystem and response to management actions in the context of factors affecting change. Functions of the Monitoring Workgroup reflect the elements of the Monitoring Program Design Framework (Figure 1).

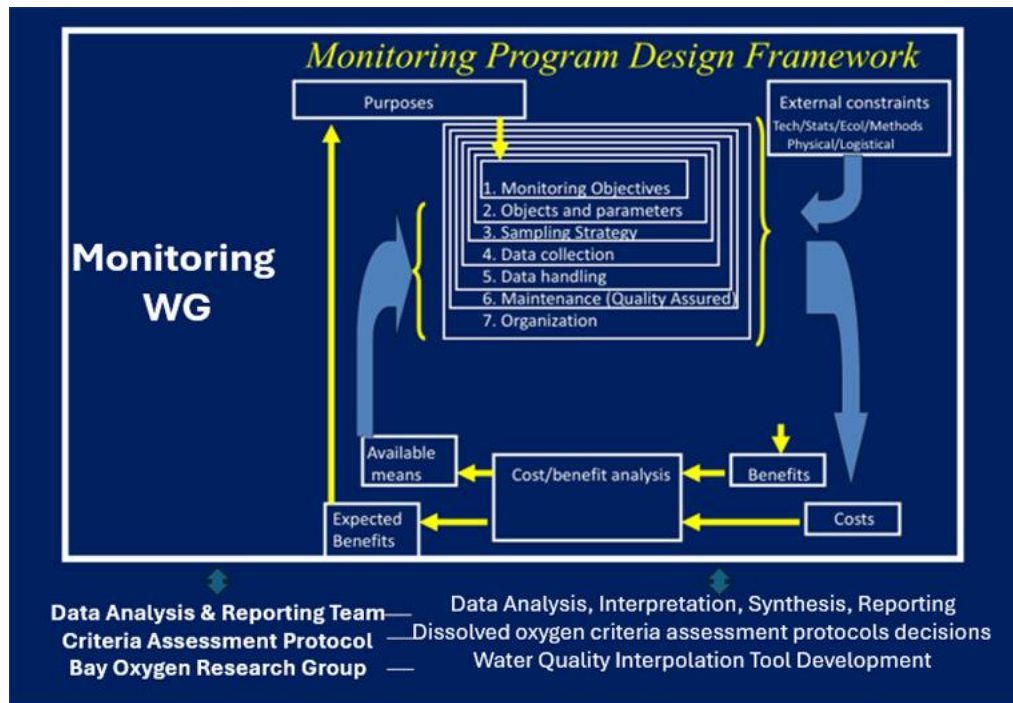


Figure 1. Monitoring Workgroup programming functions for WQSAM based on the Monitoring Program Design Framework

The Chesapeake Bay Program (CBP) works with federal, states, local, academic, tribes, and other partners to maintain, operate and strategically adapt CBP partnership monitoring networks. Data collection supports information needs of multiple 2025 Chesapeake Bay Watershed Agreement goals, outcomes and target assessments. The Monitoring Workgroup will:

- 1) Manage the Chesapeake Bay Program's core monitoring networks, described in the CBP monitoring report ([CBP, 2022](#)) (including nontidal water quality, tidal water quality, submerged aquatic vegetation, tidal benthic, and participatory science), supporting habitat characterization and assessing progress towards achieving CBP goals, outcomes and targets of the 2025 Chesapeake Bay Watershed Agreement.
- 2) In the context of CBP monitoring objectives, ensure the data collected measures physical, chemical, biological, and hydrologic parameters at spatial and temporal resolutions to support status characterization and progress assessment and reporting.
- 3) Provide Data Management (data collection, computer entry, quality assurance review, maintenance, metadata documentation, and dissemination of monitoring data and related information).
- 4) Coordination of CBP partners to ensure the completeness, comparability and integrity of data collected from monitoring networks. Ensure the quality of data generated from the CBP core monitoring networks.
- 5) Data from these monitoring efforts support analyses of short and long-term trends and shifts in the physical, biological, thermal, chemical, and hydrological regime of waters across the Bay and its watershed.

- 6) Conduct decadal monitoring program reviews to evaluate successes, challenges and gaps that inform strategic distribution of limited resources in sustaining full program function and operational capacities.
- 7) Evaluate opportunities to enhance monitoring capacity, science-based data collections and analysis, and capacity with new technology, statistics, and data management frameworks that overcome physical, budgetary and logistical constraints for the program's effective and efficient operation, maintenance, and growth.

Prior group(s) that supported these functions:

[Integrated Monitoring Networks Workgroup](#)

The CBP currently manages several monitoring networks – Tidal and Nontidal water quality, tidal benthic macroinvertebrates, submerged aquatic vegetation, participatory science monitoring, and land use and land cover monitoring, i.e., “the core networks.” The networks are complex with many federal, state, local, and academic partners collecting and contributing data. Sustained and improved monitoring will allow the CBP partners to assess and evaluate progress from restoration and conservation efforts, while identifying gaps where more attention is needed in the future.

[Hypoxia Collaborative Team](#)

Advise the design and implementation of a Chesapeake Bay-wide high-frequency hypoxia profiling network to improve the monitoring and assessment of the Bay. The development of this network draws together a diverse team of stakeholders consisting of representatives from federal and state government, as well as monitoring and modeling experts from the research community. The team will focus on developing a sampling design, defining agency roles and responsibilities, documenting operational costs, recommending QA/QC protocols, prioritizing near term data products and management applications, and designing an analytical framework and model integration.

[Non-Tidal Workgroup](#)

Manages the stations in the Chesapeake Bay Program's nontidal water quality monitoring network and coordinates monitoring and assessment with additional networks to achieve the goals and outcomes of the 2014 Chesapeake Bay Watershed Agreement. This group is comprised of a leadership team that meets every other month comprised of USGS and EPA, and the full workgroup meets on the opposite months and includes partners who collect non-tidal water quality samples in the field, run the analyses, and discuss results.

[Data Integrity Workgroup](#)

Provides direction and guidance on field and laboratory methods and QA/QC related to the collection, processing and assessment of water quality monitoring data, as well as ensuring information completeness, comparability, and integrity. Its members are technical advisors to the monitoring and modeling workgroups of the STAR Team concerning field and analytical

methodology and quality assurance issues related to collection, processing and assessment of water quality data, with a focus on tidal water quality data. The workgroup provides a forum for exchange of technical information focused on the standardization of methods/use of comparable methods throughout the Chesapeake Bay Monitoring Program. Members of the workgroup participate in the Coordinated Split Sample, Blind Audit and Reference Sample Programs, which also include nontidal water quality samples, and use this information to evaluate the quality of the monitoring data and to identify areas that require further study.

Notes: Consideration of a subgroup structure for tidal and nontidal, including appropriate cross-collaboration for data integrity functions.

- Clear communication channels between the Monitoring Workgroup and the Data, Analysis, and Reporting Workgroup will need to be established.

## Data, Analysis, and Reporting Workgroup

### Functions:

Coordinates and contributes to explaining water quality conditions and changes and the utilization of this information into decision making. The Data, Analysis, and Reporting Workgroup objectives are to 1) maintain and advance the analysis, interpretation, and communication of changing water quality conditions across the Bay and its watershed and 2) provide support for the integration of water quality data and analytical insight to inform science-based management decisions across the Chesapeake Bay restoration effort.

This workgroup directly supports the following WQSAM targets:

- Maintain full core monitoring network operations (i.e., nontidal water quality, SAV, tidal water quality, benthic and community science) annually to **support analysis and communication of water quality loads, trends and criteria attainment**.
- Maintain or exceed the rate of improvement in the **water quality standards attainment indicator** relative to the 1985-2022 baseline.
- **Analyze and report status/loads, trends and factors affecting those trends** for nontidal and tidal water quality.

The workgroup fosters collaboration among government and state agencies, academic researchers, and non-profits to identify research synergies to better understand spatial and temporal water quality changes and develop and share analytical tools. Through cross-pollination of ideas and regular engagement with the broader research and management community, the workgroup strengthens collective scientific insight and supports transparent communication of progress.

Prior group(s) that supported these functions:

[Integrated Trends Analysis Team \(ITAT\)](#)

Identifies opportunities for collaborative research that will enhance our understanding of spatial and temporal patterns in water quality. ITAT aims to combine the efforts of the Chesapeake Bay Program analysts with those of investigators in governmental, academic, and non-profit organizations to identify potential research synergies and collaborations that will enhance our understanding of spatial and temporal patterns in water quality.

ITAT's goals are as follows: 1) Gather researchers and analysts from various governmental, academic, non-profit, and private organizations for biannual meetings to identify the broad scope of on-going work related to trends and patterns of water quality in the Chesapeake watershed and estuary. 2) Discover previously unidentified linkages among the ongoing research activities of participating individuals and organizations. 3) Develop a standard set of analysis tools that can be applied in any relevant ecosystem within the Chesapeake watershed and estuary. 4) Foster increased collaboration and awareness of ongoing research. 5) Provide a forum for bringing findings to the broader Chesapeake Bay management community.

Notes: Further discussion needed on membership since the work requires engagement from both the scientific community and management community. Agenda setting and planning will be key priorities for this group to ensure representation and participation can be fluid among both the scientific and management communities.

## Criteria Assessment Protocol (CAP)

### Functions:

Addresses and advises on questions related to water quality criteria assessment protocols. CAP objectives are 1) to create and document a partnership agreement on, and provide scientific support to MD, VA, DE and DC underpinning adoption of criteria assessment protocols for the remaining DO criteria in time and 2) prioritize and resolve additional water quality criteria assessment protocol questions from the partnership.

Prior group(s) that supported these functions: NA

Notes: Suggestion for CAP to become an Action Team and will function as such until obligation from the [WQSAM outcome](#) (*Develop and expand partnership-approved approaches for assessing whether water quality criteria are being met for all designated uses. For dissolved oxygen criteria, establish an approved method by 2028 and apply the method for data analysis and reporting by the end of 2030*) is fulfilled.

## Bay Oxygen Research Group (BORG)

### Functions:

The Bay Oxygen Research Group is helping to develop a new water quality interpolation tool to generate dissolved oxygen estimates across space and through time, improving upon the current spatial interpolation method used in the Chesapeake Bay Program partnership.

Outputs of the tool are designed to support expanded evaluation of short-duration criteria (i.e., instantaneous minimum, 1-day mean, 7 day-mean) and aid in diverse aquatic life habitat suitability assessments. The group will focus on development of the initial tools and will advance work on application and education in the following years.

Prior group(s) that supported these functions: NA

Notes: The primary work of BORG is almost complete, which is/was the development of a new 4-dimensional (4D) water quality interpolation tool.

Documentation of the 4D interpolator tool development is being developed in preparation for the STAC review. STAC review of the tool and its documentation is scheduled to begin in November 2026.

Suggestion for BORG to become an Action Team that reports directly to the CWGT until it sunsets. The Action Team can be recalled for addressing cross Goal Team-partnership analysis requests. Addressing analyses requests will be factored into Goal Team priorities.

#### **Relationship between CAP and BORG**

- BORG developed a new interpolation method (time and space) that produces dissolved oxygen distributions using QA'd data from multiple sources of tidal water quality monitoring data.
- The CAP workgroup is responsible for developing the rules that will be applied to interpolator outputs for evaluating criteria assessment for the partnership. Once the CAP workgroup completes its deliberations and determines the rules for all DO criteria assessment, custom widgets/applications of the 4D interpolator can be developed to match those rules. There will potentially be many uses for the 4D interpolator that inform progress in response to management (e.g., attainment deficit, attainment buffer, species habitat suitability assessments) with the primary function of assessing all dissolved oxygen criteria in the tidal bay.

#### **Proposed Groups for Reducing Excess Nitrogen, Phosphorus and Sediment (RENPS)**

##### Outcome Language:

Implement and maintain practices and controls to reduce nitrogen, phosphorus and sediment. These reductions are necessary to achieve the applicable water quality standards, as described in

the Bay TMDL. Those water quality standards support living resources and protect human health, as required by the Clean Water Act.

- Through 2030, signatories will continue to accelerate completion of all interim water quality planning targets through implementation of Chesapeake Bay Watershed Implementation Plans, two-year milestone commitments and other innovative strategies to achieve and maintain reduced levels of nitrogen, phosphorus and sediment.
- By December 31, 2030, revise the planning targets approved by the Principals' Staff Committee for nitrogen, phosphorus and sediment, incorporating the latest watershed modeling, monitoring data and research findings, and develop new or amended Watershed Implementation Plans to meet the updated targets by 2040.
- Demonstrate net reductions in nitrogen, phosphorus and sediment through multiple lines of evidence, including modeling and monitoring data.

Proposed Workgroups and Action Teams:

1. Agriculture Workgroup
2. Agricultural Modeling Team
3. Urban Stormwater Workgroup
4. Wastewater Treatment Workgroup
5. Watershed Technical Workgroup
6. Federal Facilities Workgroup
7. Modeling Workgroup

## Agriculture Workgroup

Functions: Provide expertise and leadership on development and implementation of policies, programs and research to reduce pollutant loads delivered from agricultural lands and animal operations to upstream waters and the Chesapeake Bay.

- Provide a forum for discussion, exchange of information and evaluation between federal, state and local agencies, conservation districts, universities, agri-business and the corporate sector on sustainable and/or cost-effective agricultural production systems that benefit water and air quality.
- Provide recommendations on the prioritization of federal and state technical and financial resources on specific practices in priority watersheds.
- Provide technical expertise and leadership to support the development and implementation of agricultural elements within the Chesapeake Bay TMDL, Watershed Implementation Plans, two-year milestones, and tracking and reporting mechanisms that support an adaptive management approach towards Bay restoration.
- Coordinate with CWGT Watershed Technical Workgroup to identify, define, quantify and incorporate pollutant reduction and conservation practices on agricultural lands and animal operations into the Chesapeake Bay Program decision support system.

Prior Group (s) that supported these functions: No change.

Outcome(s) and Target(s) Supported: RENPS, others as appropriate

## Agricultural Modeling Team

Functions: Provide agricultural modeling assistance to support the Agriculture Workgroup (AgWG) through the development of the Phase 7 (WSM) inputs.

- Review data preprocessing methods and agricultural inputs to ensure that Phase 7 WSM utilizes the best available information to reflect agricultural conditions in the watershed and how they change through time.
- Review [Phase 6] WSM assumptions related to the applications of nutrients on agricultural lands and determine if changes are appropriate for Phase 7.
- Consideration of land use/load source category changes.
- Coordinate with USDA agencies to identify supporting model structures, analysis methods and agricultural databases.
- Make decisions on what the most appropriate agricultural input data are for the Phase 7 WSM.

Prior Group (s) that supported these functions: No change.

Outcome(s) and Target(s) Supported: RENPS

Notes: This is an Action Team under the Agriculture Workgroup and will function until its charge is fulfilled, with potential to reactivate if needed for future model updates.

## Urban Stormwater Workgroup

Functions: Facilitate the implementation of stormwater controls to achieve the necessary pollutant reduction planning targets as defined under the 2010 Chesapeake Bay TMDL (Bay TMDL); and to support the efforts of the Workgroup members' state and local stormwater initiatives.

- Support the CWGT on urban and suburban stormwater issues
- Provide data and support to CBP stormwater modeling efforts
- Review stormwater BMPs
- Promote innovation in the field of stormwater
- Address issues of interest to workgroup participants

Prior group(s) that supported these functions: No change.

Outcome(s) and Target(s) Supported: RENPS, others as appropriate

## Wastewater Workgroup

Functions: Facilitate implementing regulatory approaches to wastewater treatment in the Bay watershed.

- Track and report wastewater data



- Identify and evaluate new wastewater treatment technologies
- Engage in peer-to-peer learning and provide a discussion forum
- Identify and harness opportunities with other workgroups on co-benefits
- Initiate and coordinate activities on wastewater topics in response to CWGT requests

Prior group(s) that supported these functions: No change.

Outcome(s) and Target(s) Supported: RENPS, others as appropriate

## Watershed Technical Workgroup

Functions: Provide a forum for communication and discussion between and among the jurisdictions and other CBP participants on technical issues related to Best Management Practices (BMPs), Chesapeake Bay Watershed Model processes, and management strategy development and implementation reporting.

- Support the Clean Water Goal Team (CWGT) and the greater Bay Program partners in implementing management strategies to achieve the nutrient and sediment reductions necessary to restore the Bay.
- Support development of BMP Expert Panel technical appendices.
- Review and approve the recommended BMP definitions and efficiencies from source workgroups and local jurisdictions, in collaboration with the Scientific and Technical Advisory Committee (STAC) and CWGT workgroups. Ensure that BMPs are consistent across sectors and communicated clearly.
- Review and approve how BMPs are simulated in the Watershed Model to ensure that the assumptions accurately reflect real world conditions and are consistent and equitable between the different sectors.
- Review and approve how BMPs are tracked and reported by CBP partner jurisdictions and agencies for use in the Watershed Model to ensure that the assumptions accurately reflect real world conditions and are consistent and equitable between the different sectors and are communicated clearly.
- Provide technical review & recommendations to the CBP Modeling team and CWGT on updates to Watershed Model Processes, input data, and assessment of annual progress.

Prior Group(s) that supported these functions: WTWG and Federal Facilities Workgroup (if determined to be incorporated into WTWG).

Outcome(s) and Target(s) Supported: RENPS

Notes: Additional discussions are needed related to the potential integration of the functions of the current FFWG into the WTWG, should the CWGT decide to go down that path. If incorporated into the WTWG, conversations would need to take place surrounding the representation of federal agencies on the WTWG and the frequency of agenda items relevant to federal facilities.

## Federal Facilities Workgroup

Functions: The current Federal Facility Workgroup (FFWG) consists of federal and state representatives and provides a forum for the federal and state representatives within the watershed to work directly. Federal facilities are responsible for annual BMP implementation progress reporting to respective jurisdictional partners. Topics center around items related to the annual progress submission and analysis process and the related tracking and reporting of BMPs on federal facilities.

Prior Group (s) that supported these functions: (See WTWG information above)

Outcome(s) and Target(s) Supported: RENPS, others as appropriate

Notes: Additional discussions are needed related to the potential integration of the functions of the current FFWG into the WTWG, should the CWGT decide to go down that path. The FFWG maintains a listserv with jurisdictional and federal partners which, should the group be included in the WTWG, would be maintained for communications as needed.

## Modeling Workgroup

Functions: Provide the Chesapeake Bay Program with state-of-the-art decision-support modeling tools to assess the effects of current and proposed watershed management practices on nutrient and sediment loads, as well as the effects of those changing loads on water quality and living resources.

Prior Group (s) that supported these functions: No change.

Outcome(s) and Target(s) Supported: RENPS, others as appropriate

Notes: Continued discussion is needed about membership of this workgroup to determine the best membership makeup (other than the 9 signatory/6 at-large members) to carry out its role.

## **Proposed Groups for Toxic and Emerging Contaminants (TEC)**

Outcome Language:

Reduce the amount and effect of toxic contaminants, such as PCBs, plastics, mercury and PFAS, on the waters, lands, fisheries, wildlife and communities of the Chesapeake Bay watershed through an increased understanding of their impacts and mitigation options.

- Promote information sharing between researchers, program managers and policymakers on the lessons learned, best practices and most up-to-date science, policy and communications around the toxic contaminants impacting the Chesapeake Bay watershed.

Proposed Workgroups and Action Teams:

1. Toxic Contaminants Workgroup
2. Plastic Pollution Action Team

## Toxic Contaminants Workgroup

Functions: Facilitate information sharing on the lessons learned, best practices and most up-to-date science, policy and communications around the toxic contaminants impacting the Chesapeake Bay watershed.

Prior Group (s) that supported these functions: No change.

Outcome(s) and Target(s) Supported: Toxic and Emerging Contaminants

## Plastic Pollution Action Team

Functions: Serve its charge from the Management Board to seek to reduce the presence and impacts of plastic pollution on the Chesapeake Bay and its watershed by overseeing research that will help to determine the effects that specifically microplastics have on the Chesapeake Bay ecosystem.

Prior Group (s) that supported these functions: No change.

Outcome(s) and Target(s) Supported: Toxic and Emerging Contaminants

Notes: PPAT is currently an Action Team, serving a [charge](#) under the Management Board. The proposal is to transition this group into a workgroup, which would continue to serve this charge and then upon completion reassess its focus. Note, if it becomes a workgroup a name change also needs to occur.