

# Data samples available in the Chesapeake Data Explorer

## Benthic data

Benthic data in the database is represented by number of sampling events.

Tier	Sampling events
1	53

## Water quality data

Water quality data in the database is represented by number of data points sampled throughout the watershed, and includes replicate samples.

Tier	Parameter	Data points
<b>1</b>	Total dissolved solids	3893
	Water temperature	1153
	Water clarity	1150
	Dissolved oxygen	1086
	Orthophosphate	548
	pH	543
	Nitrate-Nitrogen	535
	E. coli	258
	Salinity	91
<b>2</b>	Dissolved oxygen	3969
	pH	3526
	Water temperature	3397
	Nitrate-Nitrogen	2949
	Water clarity	2919
	Orthophosphate	2803
	Conductivity	1030
	Air temperature	613
	Ammonia	61
	Total suspended solids	58
	Total nitrogen	53
	E. coli	43
	Nitrite-Nitrate	12
	Total Kjeldahl Nitrogen	11
Total phosphorus, chlorophyll <i>a</i> , Enterococcus	<10	
<b>3</b>	Dissolved oxygen	10
	Water temperature	6
	Salinity	5
	Water clarity	1

# How CMC fits into the Chesapeake Bay Agreement Goals



Goals	Outcomes	Benefits
Stewardship	Citizen Stewardship	<ul style="list-style-type: none"> <li>• CMC trainings expand the # of trained citizen scientists every year.</li> <li>• CMC prioritization report identified existing programs and partners coordinating volunteer water quality monitoring in the watershed.</li> <li>• CMC is actively working to engage conservation leaders at the Watershed Forum through a planned pre-forum workshop.</li> </ul>
Water quality	2017 WIP 2025 WIP Water Quality Standards Attainment and Monitoring	<ul style="list-style-type: none"> <li>• Coordination of monitoring groups throughout the watershed addresses spatial monitoring gaps of WQ parameters.</li> <li>• The rigor and quality assurance of volunteers monitoring with the CMC provides the potential to integrate volunteer monitoring data into CBP water quality attainment standards.</li> <li>• Nutrient and sediment monitoring by agencies can be supplemented by citizen science work through the CMC.</li> </ul>
Healthy watersheds	Healthy Watersheds	<ul style="list-style-type: none"> <li>• CMC volunteers provide a greater opportunity to monitor healthy watersheds in each jurisdiction.</li> <li>• There is potential for CMC data to be used by the Healthy Watersheds GIT for their indicator.</li> </ul>
Vital habitats	Stream health Brook Trout	<ul style="list-style-type: none"> <li>• Identified spatial gaps in benthic monitoring programs and potential to fill those gaps.</li> <li>• CMC partners worked with ICPRB and stream health workshop to recommend that citizen science data be used in the Chessie BIBI.</li> <li>• USGS temperature monitoring with volunteers are currently contributing to Brook Trout coldwater initiatives.</li> </ul>

# Commitments of the Memorandum of Understanding



Commitments	Examples of jurisdictional support
<p>Work cooperatively with the CMC and Chesapeake Bay Program partnership to support and sustain a network of citizen science and non-traditional partners.</p>	<p>State agencies have provided audit services for the CMC Tier 3 groups through the Data Integrity Workgroup.</p> <p>Virginia has a monitoring coordinator to provide technical support to citizen science monitoring groups.</p> <p>Jurisdictions can use the CMC database to collect data when they put out the calls for data to volunteer groups.</p>
<p>Work to support an open-access clearinghouse of quality-assured environmental data generated by citizen scientists and non-traditional partners and integrate this data into monitoring networks for educational, management, targeting and regulatory assessment applications.</p>	<p>Acknowledging the CMC database as a centralized hub for citizen science data and using it to access available data.</p>
<p>Promote the collection of water quality, benthic macroinvertebrate, and other monitoring data that can inform the Bay Program to adaptively manage and track progress toward the Watershed Agreement by non-traditional partners, such as, local and regional organizations, agencies, and/or educational institutions.</p>	<p>The CMC would like jurisdictions to start thinking about integrating citizen science data into their monitoring programs.</p>
<p>Develop and adopt methods for data integration into regional monitoring and assessment strategies.</p>	<p>The CMC would like jurisdictions to start thinking about integrating citizen science data into their monitoring programs.</p>
<p>Collaborate with the CMC in training with diverse, equitable and inclusive volunteer and non-traditional partner base for monitoring efforts.</p>	<p>Data to decision workshops held in 2015 and 2016 were a collection of full spectrum of representation, from state agencies to monitoring groups, working together to collaborate on monitoring efforts.</p>
<p>Support and actively contribute to the review and implementation of standard protocols and quality assurance programs to produce data of known and documented quality across all seven watershed jurisdictions.</p>	<p>Continued jurisdiction representation in the Data Integrity Workgroup and other CBP workgroups that are contributing to the review and implementation of standard protocols.</p>