DATA USE FACT SHEET
MARYLAND

This document outlines how data in CMC Data Explorer is used by federal, state and other partner organizations. Through these partnerships, CMC data directly supports regulatory assessments, ecological report cards, and public information tools. CMC data can be used for other data products not listed in this table.

Organization	Data Product	Parameters Included	CMC Tier	Publication Frequency
MDE	303(d) and 305(b) Integrated Report	**Non-tidal:** Dissolved oxygen, pH, turbidity, bacteria (*E. coli* and enterococcus). **Tidal:** Dissolved oxygen, temperature, salinity, depth submitted through Chesapeake Bay Program's Interpolator Assessment **Benthic:** MBSS, genus-level analysis	3	Every 2 Years
	303(d) and 305(b) Integrated Report	**Tidal and Non-tidal:** Dissolved oxygen, pH, turbidity, field observations	1 &2	Every 2 Years
CBP	Evaluation of Water Quality Goals	**Tidal:** Dissolved oxygen, water clarity, chlorophyll *a*	3	Annually
	Interpolator Tools	**Tidal:** Dissolved oxygen, water temperature, salinity, water clarity, chlorophyll *a*	2 & 3	Analysis Dependent
UMCES	Chesapeake Bay and Watershed Report Card	**Non-tidal:** TN, TP, turbidity, water temperature, conductivity	2 & 3	Annually
ICPRB	Chessie BIBI	**Benthic:** Family-level analysis	2	Every 6 Years
EPA	How's My Waterway?	All tidal and non-tidal data	1, 2, & 3	Annually

**Organizational acronyms are defined on the next page.*

303(d) and 305(b) Integrated Report

Maryland Department of the Environment (MDE)

As part of the federal Clean Water Act, every two years state environmental agencies have to send a report, called the Integrated Report (IR), to the U.S. Environmental Protection Agency (EPA). This report shows which surface waterbodies, like rivers, lakes, and estuaries, are clean and which ones are polluted (impaired) within the state. Data from federal, state, academic, and volunteer partners are used to create this report. CMC Tier 3 data can be used for regulatory assessment of MD's waters, which means officially listing impaired waters (Category 5) or determining that waters are meeting their goals (Category 2). All other CMC data submitted to MDE are used for supplemental informational purposes, including adding waters to Category 3 that need additional information or follow-up assessments, targeted screening, baseline conditions, or educational purposes. MDE gathers data every two years and typically includes a five-year data window (example: the 2026 IR includes data from 2019-2023).

Interpolator Tools (3D and 4D) and Evaluation of Water Quality Goals

Chesapeake Bay Program (CBP)

The Chesapeake Bay Program uses high quality data from a variety of federal, state and CMC partners as part of the annual tracking of progress toward meeting water quality goals established to protect living resources in Chesapeake Bay tidal waters. CMC Tidal Tier 3 dissolved oxygen, salinity, temperature, and water clarity data are used in an analysis which involves spatially interpolating observations and evaluating the results by segment. Results are aggregated by the Chesapeake Bay Program into a Bay-wide indicator to estimate progress towards meeting living resources' habitat needs.

Chesapeake Bay and Watershed Report Card

University of Maryland Center for Environmental Science (UMCES)

The Chesapeake Bay and Watershed Report Card gives a clear and detailed look at the health of the Chesapeake Bay and its watershed. Published annually, the report card serves as a vital tool for translating complex environmental data into an accessible format, allowing the general public, policymakers, and stakeholders to better comprehend the shifting health of the Chesapeake ecosystem. With help from engaged stakeholders, since 2016 the report card has transformed from strictly an environmental score into a holistic evaluation of the entire watershed's health. Today, the assessment utilizes a comprehensive, multi-metric framework to grade the region through water quality, ecological, and socio-economic indicators.

Chessie BIBI

Interstate Commission on the Potomac River Basin (ICPRB)

The Chesapeake basin-wide index of biotic integrity, or "Chessie BIBI, is a tool used to check the health of freshwater streams and small rivers within the Chesapeake Bay watershed. This tool looks at benthic macroinvertebrates (family-level), which are small, spineless bugs and critters like crayfish, snails, and beetle larvae that live in the water. Some of these bugs tolerate pollution better than others, so the BIBI calculates a stream score by counting the presence and number of bugs in a stream. This score is used to categorize the stream health into categories from very poor to excellent stream health across different regions in the watershed. ICPRB gathers data about every six years.

How's My Waterway?

U. S. Environmental Protection Agency (EPA)

How's My Waterway was designed to share easy-to-understand information about the health of surface waterbodies such as rivers, lakes, and streams. The platform combines data provided by a variety of partners, including state, federal, tribal, local agencies and participatory science groups and provides users with both a local and a nationwide view of water quality. To get this data, How's My Waterway pulls information from the U.S EPA's Water Quality Portal, the nation's largest library of water quality monitoring data. Data from the CMC Data Explorer are uploaded to EPA's Water Quality Portal annually to ensure our data are used in critical data tools, like How's My Waterway.