

Blue Water Baltimore routinely monitors water quality at 49 stations in the rivers, streams, and Harbor of the Patapsco River watershed.

Using our data, we calculate scores for the health of Baltimore's waters according to the Mid-Atlantic Tributary Assessment Coalition protocol. Each station is scored from 0-100% on the following factors: chlorophyll, conductivity, dissolved oxygen, water clarity, and total nitrogen and phosphorus.

This map shows overall ecosystem health scores from 2021. The graphs below show regional health scores for tidal and non-tidal waterways since the inception of the program.

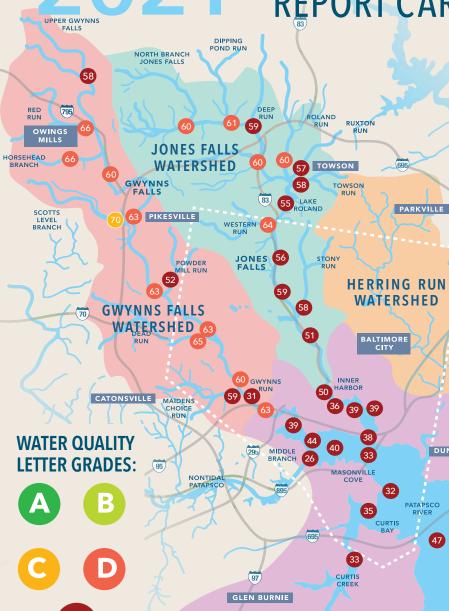
To view bacteria data, annual scores for individual parameters, our most recent results at each station, and to learn more about our robust monitoring program, vist BaltimoreWaterWatch.org

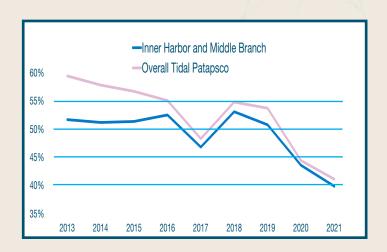
**WATER QUALITY** REPORT CARD

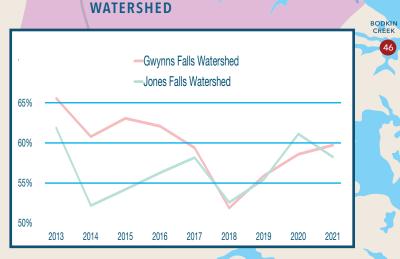
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OLD ROAD BAY







**BALTIMORE HARBOR** 



2021 marked our ninth season of data collection and analysis in the waterways flowing into the Patapsco River and ultimately the Chesapeake Bay. A snapshot of overall ecological health is shown for each of our 49 monitoring stations here, and a full breakdown of the data is available at BaltimoreWaterWatch.org.

The overall ecological health in the Baltimore Harbor and Mainstem Patapsco regions have declined over the past nine years. Out of the 21 tidal stations that we scored in 2021, 17 of them matched or received their lowest overall Eco-Score recorded to date.

Rainfall drives waterway health in our region, and while 2021 was a typical year for rainfall in the Baltimore region, we saw the worst chlorophyll and phosphorus levels that we have ever recorded at many of our tidal stations. Chlorophyll measures how much algae is in the water, and is a symptom of excessive nutrients. Phosphorus is a nutrient that feeds microscopic plants in the water, which can lead to algae blooms. Common sources of nutrient pollution are untreated sewage, malfunctioning wastewater treatment plants, urban stormwater runoff, pet waste, and fertilizers.

While scores at our non-tidal stations in the Gwynns Falls and Jones Falls streams were poor, individual metrics of water health tell a mixed story. Bacteria scores were worse at 20 out of 27 monitoring stations in 2021 than they were in 2020. Similarly, nitrogen scores fell at nearly every station, and conductivity continues to drag down the overall scores across the board. On the other hand, some non-tidal health indicators are doing quite well. Water clarity and phosphorus levels improved at many stations in both watersheds, in stark contrast to what we documented in our tidal waterways.

Blue Water Baltimore is building a clean-water movement in the Baltimore region. Our data is the scientific backbone of the restoration, advocacy, engagement, and enforcement work we conduct throughout the year. To access our full dataset from 2021 and to see our most up-to-date readings, visit BaltimoreWaterWatch.org.

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