

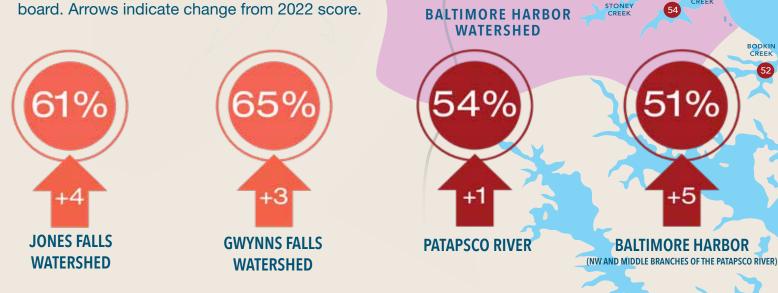
This map shows ecosystem health scores from 2023 across the Baltimore region. Blue Water Baltimore routinely monitors water quality at 49 stations in the rivers, streams, and Harbor of the Patapsco River watershed. Each station is assigned a score from 0-100% for water health parameters including chlorophyll, conductivity, dissolved oxygen, water clarity, total nitrogen, and total phosphorus. Those scores are rolled up to calculate an overall ecosystem health score, which tells us how sick or healthy our streams and rivers are.

To view bacteria data, annual scores for individual parameters and stations, recent results, and to learn more about our robust monitoring program, visit

BaltimoreWaterWatch.org

## **Regional Scores**

In 2023, overall region scores improved across the board. Arrows indicate change from 2022 score.



2023

NORTH BRANCH JONES FALLS

GWYNNS FALLS

**GWYNNS FALLS** 

CATONSVILLE

WATERSHED 67

MAIDENS

NONTIDA PATAPSCO

95

PIKESVILLE

**JONES FALLS** 

WATERSHED

POWDER

ILL RUN

UPPER GWYNNS

795

70

WATER QUALITY

**REPORT CARD** 

90-100 Δ

PARKVILLE

DUNDALK

PATAPSCO

RIVER

COX CREEK

57

61

BEAR CREEK

51

HERRING RUN

WATERSHED

**INNER HARBOR** 

50 WORLD TRADE CENTER

**49 SCIENCE CENTER** 

50 50 49

MASONVILLE

COVE

50

57

CURTIS

**57 JONES FALLS OUTLET** 

60-69

D

0-59

83

ROLAND RUN

58 TOWSON

STONY

RUN

57 LAKE ROLAND

RUXTON

RUN

TOWSON

DEEP

RUN

WESTERN 65

JONES FALLS

BALTIMORE CITY

GWYNNS RUN

49

52 MIDDLE BRANCH 45

49

295

97

GLEN BURNIE

DIPPING POND RUN

## BLUE 2023 WATER OUALITY REPORT CARD

2023 marked our eleventh season of data collection and analysis in the waterways flowing throughout the Baltimore region. A snapshot of overall ecological health is shown for each of our 50 monitoring stations here, and a full breakdown of the data is available at BaltimoreWaterWatch.org.

All of our eco-regions have shown improvement since 2022. In fact, 25 of our 27 stream stations scored better overall in 2023 than in 2022, and 17 of our 23 riverine stations showed improvement. However, the overall ecological health in the Baltimore Harbor, Patapsco River, and Gwynns Falls regions are showing a weak declining trend over the past eleven years. The Jones Falls region is showing a weak improving trend.

Precipitation drives waterway health in our region because land-based pollutants are washed into our streams and rivers every time it rains, which negatively impacts individual parameter scores. For example, we measure nitrogen and phosphorus levels because they are nutrients that are critical to ecosystem health. Stormwater runoff, malfunctioning wastewater treatment plants, and other problems on land can contribute excessive nutrients to our waterways which ultimately leads to algae blooms and fish kills. Sewage overflows continue to threaten aquatic and human health, as storm events overwhelm Baltimore's aging underground pipes, sending raw sewage into delicate ecosystems. Another parameter—conductivity, which measures dissolved salts and inorganic chemicals in the water—is a primary marker of human impact on our waterways, because it indicates that a stream has been damaged by sources like winter road salt and sewage.

In order to improve overall ecosystem health scores, we must double down on green stormwater infrastructure like rain gardens to offset the rainfall that sweeps pollutants into the water and make it easier to voluntarily install projects; adequately fund sewer infrastructure projects and the maintenance costs to keep our systems in good working order; and pass legislation that eliminates trash pollution at the source, gives community members the means to hold polluters accountable, and strengthens laws for clean water.

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 2023 and to see our most up-to-date readings, visit BaltimoreWaterWatch.org.



Learn More At BlueWaterBaltimore.org

