

DC Citizen Science Water Quality Monitoring

2024 Report

The DC Citizen Science Water Quality Monitoring Program has gathered and shared water quality data for 24 sites since 2019. With six years of data, we can examine trends in recreational water quality criteria: *E. coli* bacteria, turbidity, and pH. This has helped us understand which sites consistently have good water quality, where restoration is needed, and how rain influences water quality. We've found a few key takeaways:

1 Precipitation

After rain, pollutants including bacteria can be washed into streams and rivers across DC through **stormwater runoff**. We consistently found higher bacteria levels after rain.

2 Mainstem vs. Tributaries

Mainstem river sites have higher **water volume** than streams, which helps dilute bacteria. Streams usually weave closer to urbanized areas, so stormwater runoff has a more immediate effect on them.

3 Wastewater infrastructure

A major source of bacteria is from wastewater systems. DC Water's [Clean Rivers Project](#) builds new overflow tunnels and fixes aging sewer pipes. Sites affected by completed projects have better water quality.

Good Recreational Water Quality

Kingman Island (AR-3)
Buzzard Point (AR-6)
Washington Channel (AR-7)
Tidal Basin (PR-6)
Columbia Island (PR-7)

What do these have in common?

They are on the **mainstem** of rivers, so they get a lot of water flowing through the sites, which dilutes these sites' bacteria levels. They are also generally further **downstream** and far from combined sewer outfalls.

Poor Recreational Water Quality

Hickey Run (AR-2)
Watts Branch (WB-1 & WB-2)
Rock Creek at Juniper St. (RC-1)
Normanstone Run (RC-7)

What do these have in common?

These sites are particularly unsafe for human and pet contact. They are small **streams**, so they have relatively little water flow. These sites' bacteria levels are heavily influenced by precipitation and weaknesses in wastewater infrastructure.

We encourage you to check the water quality before recreating and avoid contact with water for 72 hours after rain. During the summer, weekly results can be found on the [CMC Data Explorer](#), the [Alliance for the Chesapeake Bay website](#), and social media.



Want to learn more?
Click here to read the
full report.

2024 DC Recreational Water Quality

2024 Bacteria Monitoring Snapshot

✓ Good water quality

Water-based recreation is usually safe at these sites.

⊖ Variable water quality

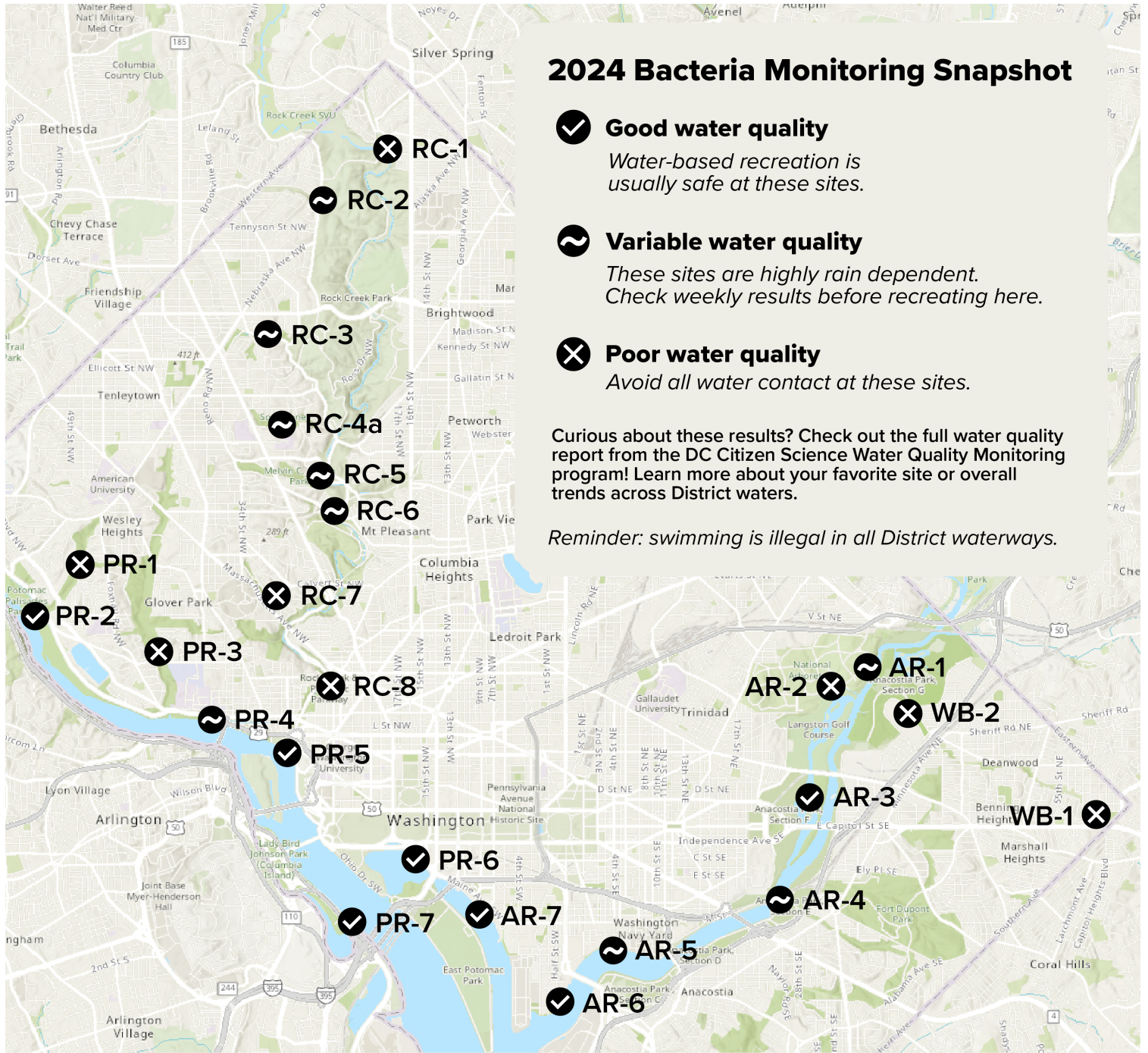
These sites are highly rain dependent. Check weekly results before recreating here.

✗ Poor water quality

Avoid all water contact at these sites.

Curious about these results? Check out the full water quality report from the DC Citizen Science Water Quality Monitoring program! Learn more about your favorite site or overall trends across District waters.

Reminder: swimming is illegal in all District waterways.



✓ Good Water Quality

- AR-3: Kingman Island
- AR-6: Buzzard Point
- AR-7: Washington Channel
- PR-2: Fletchers Cove
- PR-5: Thompson Boat Center
- PR-6: Tidal Basin
- PR-7: Columbia Island

⊖ Variable Water Quality

- AR-1: National Arboretum
- AR-4: Anacostia Park
- AR-5: Yards Marina
- PR-4: Washington Canoe
- RC-2: Pinehurst Branch
- RC-3: Broad Branch
- RC-4a: Soapstone Creek
- RC-5: Reservation 630
- RC-6: Below Piney Branch

✗ Poor Water Quality

- AR-2: Hickey Run
- WB-1: Watts Branch at Marvin Gaye Park
- WB-2: Watts Branch at Kenilworth Park
- PR-1: Battery Kemble Park
- PR-3: Foundry Branch
- RC-1: Juniper St
- RC-7: Normanstone Run
- RC-8: P St Beach

