

Central New Jersey's Water Quality at a Glance

Five years of community science data reveal modest but broad declines across the region's monitored streams and lakes—with road salt, turbidity, and pH driving the trend.

Data: Jan 2021 – Dec 2025

Central New Jersey

100+ Volunteer Monitors

THE BOTTOM LINE

Water quality across central New Jersey's monitored streams and lakes slipped modestly but broadly between the 2020–2024 and 2021–2025 assessment periods. Declines outnumbered improvements: 22 of 31 subwatersheds and 20 of 26 municipalities saw their overall scores decrease, though most shifts were small. pH, turbidity, and chloride showed genuinely widespread declines in score, while dissolved oxygen, nitrate, and *E. coli* had a few sharp local drops.

20 / 26

Municipalities with overall
scores declining

3

Parameters in widespread
decline: pH, turbidity,
chloride

11 / 31

Subwatersheds where pH
dropped at least one
category

Each five-year assessment window overlaps four years with the prior one, so these shifts reflect one new year of data replacing one older year — a gradual trend, not a sudden change in stream health.

AREAS OF NOTE

Greatest Concerns & Bright Spots

Greatest Concerns

Full-category drops (subwatersheds): Bear Brook, Beden Brook, Fiddlers Creek, Heathcote Brook, Little Shabakunk Creek

Full-category drops (municipalities): Millstone Township, Trenton City

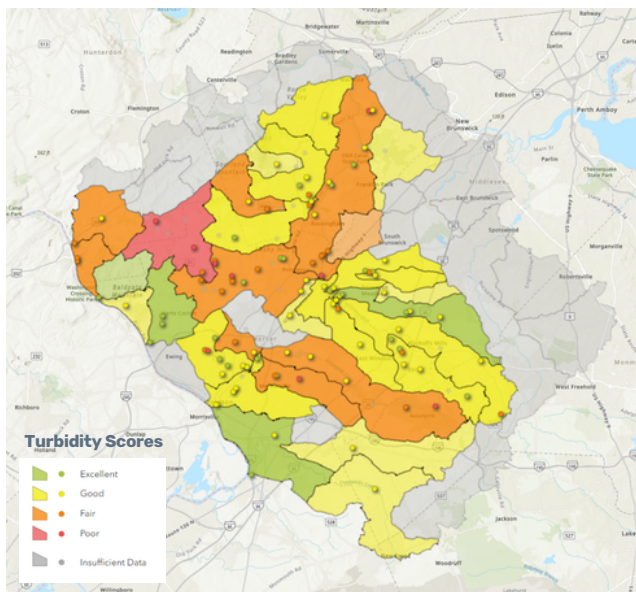
pH: Most widespread decline — 11 of 31 subwatersheds dropped; Heathcote Brook, Little Shabakunk Creek, Upper Crosswicks Creek, and Alexauken Creek fell into Poor

Bright Spots

Strongest gains: Cranbury Brook (subwatershed) and East Windsor Township (municipality)

Temperature: Improved in several areas, including Trenton City, Lawrence Township, and Princeton (Good → Excellent)

Cranbury Brook: Improved across multiple parameters, including turbidity and *E. coli*



SCORING FRAMEWORK

How to Read These Results

For each water quality parameter, volunteer-collected data are evaluated against the applicable NJ DEP Surface Water Quality Standards and scored as Excellent (4), Good (3), Fair (2), or Poor (1). For subwatersheds and municipalities with multiple monitoring sites, site scores are combined using a geometric mean to calculate the regional score. Trend results are based on assessment scores rather than raw water quality measurements. A declining trend indicates a worsening score over time.

Scan here to see the full report:



PARAMETER

SCORE TREND

NOTABLE AREAS

Temperature

Stable

Lower Assunpink & Lower Crosswicks improved; Royce Brook slipped

Turbidity

Declined

11 subwatersheds dropped a category; South Brunswick Twp fell two categories

pH

Most widespread decline

11 of 31 subwatersheds & 8 of 26 municipalities dropped; several fell into Poor

Dissolved Oxygen

Sharp local declines

Bear Brook & Heathcote Brook fell Excellent into Poor
3 municipalities dropped several fell into poor

Nitrate

Relatively stable

East Windsor Twp dropped two categories; Princeton & Lawrence Twp improved

Phosphate

Little change

Most sites remain chronically in Poor range

Chloride

Consistent decline

6 subwatersheds & 9 municipalities dropped, none improved; road salt cited as driver

Macroinvertebrates

Essentially flat

Most data-limited parameter – 7 subwatersheds lack sufficient data

E. coli

Modest shifts

Beden Brook & Rock Brook dropped; Cranbury Brook improved

PROGRAM SNAPSHOT

Three Decades of Community Science

Since 1992

StreamWatch has monitored regional waterways

~60

Streams & lakes monitored

100+

Trained volunteer monitors



Data is shared with municipal and state leaders, including NJDEP, to support regulatory action under the Clean Water Act.

STREAMWATCH ACTION TEAMS



CAT – CHEMICAL ACTION TEAM

Monthly Chemical Monitoring

Volunteers measure chemical parameters and collect samples monthly using a handheld meter and the Watershed's own lab. Tracks ongoing water quality changes.



BAT – BIOLOGICAL ACTION TEAM

Spring Macroinvertebrate Assessment

Volunteers assess habitat and sample benthic macroinvertebrates each spring, sent to an external lab for genus-level ID. NJDEP-accredited for regulatory use.



BACT – BACTERIAL ACTION TEAM

Weekly Summer Bacterial & HAB Monitoring

Volunteers monitor for HABs and E. coli for 15 summer weeks, testing for E. coli, nutrients, turbidity, and chloride. Results posted weekly to the BACT Dashboard.

GET INVOLVED

Volunteer with the Watershed

Scan here or visit
thewatershed.org/volunteer to apply:

