I’m not a big fan of going to the beach when there’s a lot of seaweed. But do you know what’s worse than a bunch of sargassum? Fecal matter!

Swimming in water with high levels of enterococci bacteria (an indicator of fecal contamination) can expose you to disease-causing microorganisms. That’s why local governments regularly test water quality to help keep people safe.

In Sydney, Australia, the Beachwatch organization tests swimming sites on a regular basis. Here’s some of what they measure:

• Enterococci levels: (see above)

• Conductivity: Lower values can signal stormwater runoff, since marine water is typically saltier.

• Dissolved oxygen: Low levels can indicate too much bacterial activity.

• Water temperature: Warmer water can help certain bacteria grow and spread faster.

This week’s Tidy Tuesday dataset included measurements of enterococci at dozens of Sydney-area beaches. In Florida, 70 CFUs or greater is considered POOR water quality, so I used this threshold to assess how many times Sydney beaches crossed this line over the past 10 years.

My findings echo some of [last year’s reports](https://www.theguardian.com/australia-news/2024/oct/26/sydney-beaches-polluted-faecal-matter-report-coogee-bronte-malabar), when heavy rains resulted in POOR ratings at several beaches.

Bottom line: don’t go in the water without first checking the latest water report.

Also, who doesn’t love lollipop charts?!

Check out my full notebook on GitHub: https://github.com/stevenvillalon/tidytuesday/tree/24a12f7d28f8fa1f0a0b53aa99ec6f170ba1f108/2025-05-20-SYDNEY.BEACHES

#DataScience #RStats #TidyTuesday