

Recreational Water Quality - 2023/24 Summer Season

Key Points

- ◆ Recreational Water Quality is monitored during the summer months at 9 coastal beaches and 10 river sites.
- ◆ The sites are monitored for indicator bacteria that allow assessment of the risk from waterborne diseases to swimmers.
- ◆ During the 2023/2024 Summer the majority of samples showed low health risk to swimmers.
- ◆ High indicator bacteria concentrations were mostly associated with rainfall.
- ◆ Most sites are graded either Good or Fair, indicating that they are generally suitable for swimming except after rainfall.

Recreational Water Quality Monitoring

Enjoying a swim at the beach or cooling off in a river are essential parts of a Kiwi summer. Marlborough generally enjoys comparatively good water quality, but there can be instances when the water contains microorganisms that can cause illness in swimmers.

To assess the risk to water users, council collects weekly samples from the most popular swimming sites. Samples are collected during the warmer months of the year, between November and March and analysed for indicator bacteria.

Currently council monitors 9 coastal beaches and 10 river swimming spots.

Once samples have been analysed, the results can be viewed on the [LAWA website](#).

Every three years, results are also summarized in a report containing in-depth analysis of seasonal results and changes over time. The last full report was published in 2023, with the next report due in 2026.

In the years between reports, report cards such as this one and a dashboard on the council website serve as data summaries that are updated every year.

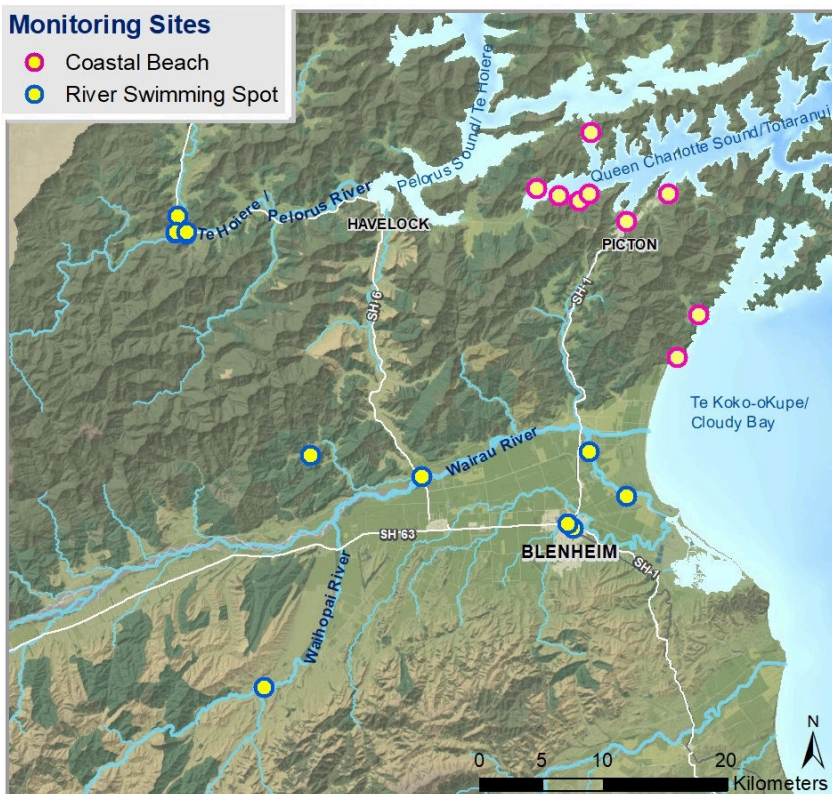


Figure 1: Map of sampling sites.

How to interpret the results

Samples are analysed for different indicator bacteria depending on the type of waterbody. Coastal samples are analysed for Enterococci, while river samples are analysed for E. coli concentrations.

Enterococci and E. coli concentrations are compared to values in the 2003 Guideline document and assigned health risk modes (Green, Amber and Red).

The table on the right shows the indicator bacteria concentrations for the three risk modes in number per 100 millilitre.

Mode	Enterococci (Coastal)	E. coli (Rivers)	Meaning
Green	<140	<280	Safe for Swimming
Amber	140-280	269-550	Increased Health Risk
Red	>280	>550	Unsafe for Swimming

Table 1: Health Risk Modes for individual sample results.

Results for the 2023/2024 Summer Season

Figure 2 shows the percentage of samples within the three Health Risk Modes for the sites sampled during the 2023/2024 summer months.

Accept for a single sample at four sites, samples taken from most coastal beaches consistently showed indicator bacteria concentrations safe for swimmers (in the Green Mode). River sites had at least one sample in the Amber or Red Mode.

High indicator bacteria concentrations generally occurred as a result of rainfall when surface run-off carries material into streams and coastal areas. It is therefore recommended to not swim during rainfall and for at least 48 hours after rainfall.

On rare occasions high indicator concentrations were caused by local sources during dry weather conditions. Possible sources are animal droppings, such as from birds, farm animals or dogs. At some sites inappropriately discarded waste or malfunctioning sewage systems are also a potential source.

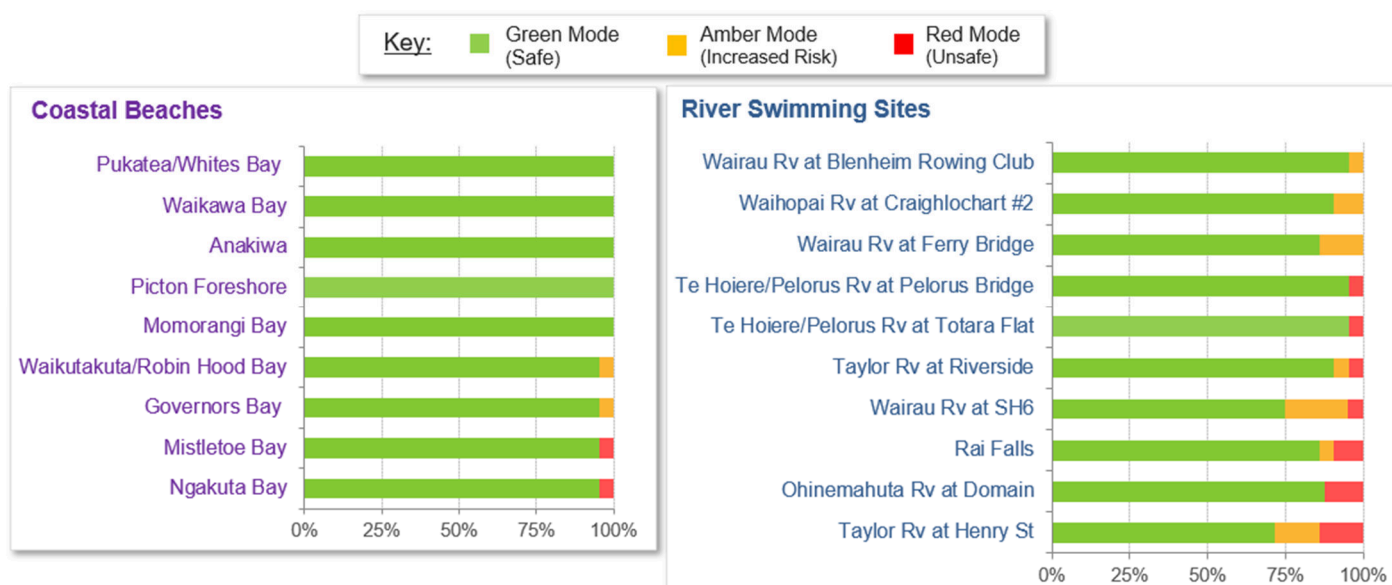


Figure 2: Percentage of samples in the three Health Risk Modes.

SFR Grades

The results from individual samples only provide a snapshot and indicator bacteria concentrations can change quickly, for example as a result of rainfall. This is especially important as there is a delay of at least 24 hours before sample results are known and a gap of one week between samples.

To still provide swimmers with relevant information, sites are assigned grades which indicate the overall suitability for swimming. These are the SFR Grades (Suitability for Contact Recreation Grades), which range from Very Good to Very Poor.

The map on the right shows SFR Grades for the sites currently monitored. Some sites have been added to the program recently and we do not yet have sufficient data to determine a grade.

The majority of sites have Good or Fair grades, which mean that they are generally suitable for swimming, expect following rainfall.

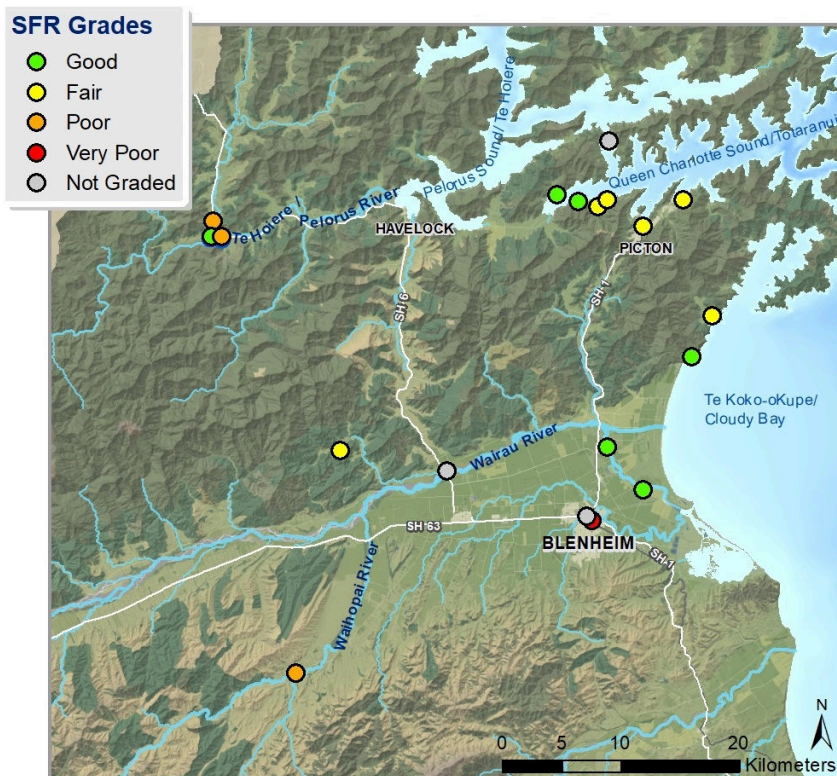


Figure 3: Current SFR Grades