

Recreational water quality 2007/08

Key points:

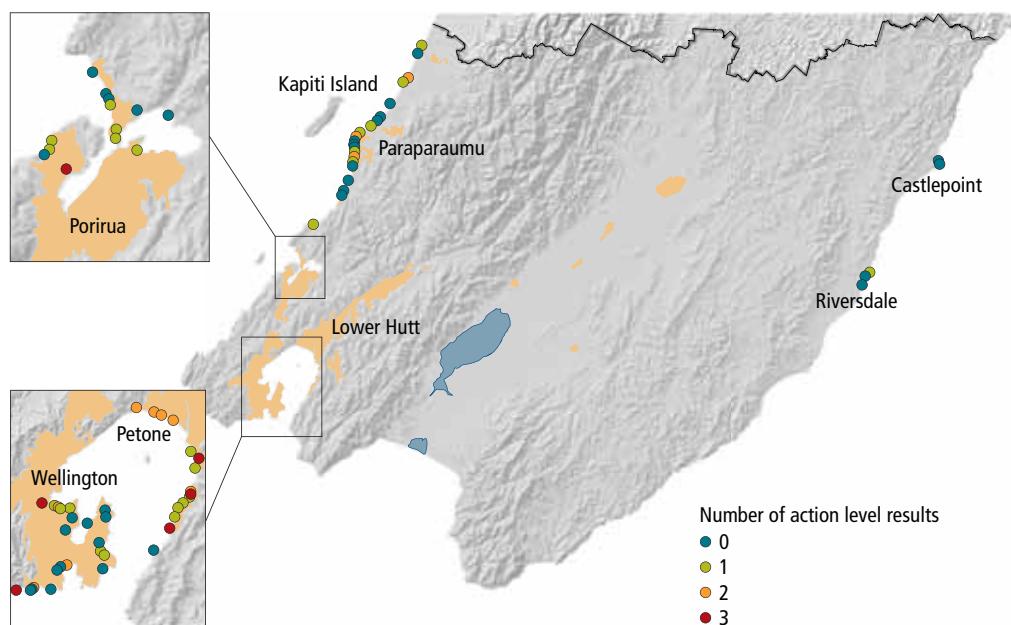
- Coastal water quality was suitable for swimming on all sampling occasions at 34 of the 77 beaches monitored during the 2007/08 bathing season.
- River water quality was suitable for swimming on all sampling occasions at five of the 21 swimming spots monitored weekly during the 2007/08 bathing season.
- Water quality, especially in rivers, was most likely to be unsuitable for swimming during and shortly after rain.
- The hot, dry summer led to extensive toxic blue-green algal growth in some rivers, especially the Hutt River.

What happened in 2007/08?

Coastal water

Recreational water quality was good at most beaches throughout the region last summer. Although 43 of the 77 sites monitored exceeded the “action” guideline of the national recreational water quality guidelines (280 enterococci/100 mL), 26 of them exceeded the guideline only once. Eleven sites exceeded the guideline on two occasions and six sites exceeded three times. Health warning signs were erected at Titahi Bay in mid December, at the rowing club in Porirua Harbour in early January and at Owhiro Bay in mid February after routine and follow-up sampling showed the “action” guideline was still being exceeded.

Sixty per cent of the 66 occasions where sites exceeded the “action” guideline coincided with at least 10 mm of rainfall in the three days prior to sampling and 36 per cent coincided with more than 10 mm of rainfall in the 24 hours prior to the day of sampling. The high correlation between rainfall events and elevated bacteria counts in coastal waters relates to runoff from the land entering stormwater systems, rivers and streams discharging to the coast. Pollution in rivers and streams can also affect water quality at some beaches during dry weather, as can re-suspension of sediments from wind and tidal action.

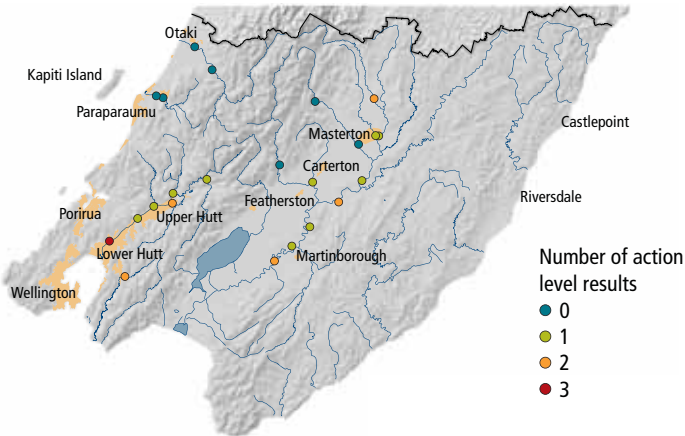


Summary of compliance with the recreational water quality guidelines for 77 coastal bathing sites monitored over the 2007/08 summer. For up-to-date results about bathing water quality, check our website at <http://www.gw.govt.nz/on-the-beaches> during summer.

Fresh water

Sixteen of the 21 freshwater sites monitored weekly last summer exceeded the “action” guideline for indicator bacteria (550 *E. coli*/100 mL). Ten sites exceeded the guideline once, five sites exceeded the guideline twice and one site (Hutt River at Boulcott) exceeded the guideline three times. As well as having the highest number of “action” level exceedances, the Hutt River at Boulcott also exceeded the “alert” level guideline (260 *E. coli*/100 mL) six times.

More than 80 per cent of the 23 “action” level results coincided with at least 10 mm of rainfall in the 72 hours prior to sampling. Rainfall events cause bacteria to be washed into rivers and streams via urban and agricultural runoff, and also stir up bacteria attached to stream sediment.



Summary of compliance with the recreational water quality guidelines for freshwater bathing sites monitored over the 2007/08 summer. Just one site on the Hutt River exceeded the guideline more than twice.

Toxic algae

Although river swimming spots were mostly safe from pathogens, the hot dry summer meant that some areas were affected by toxic blue-green algae (also known as cyanobacteria). Toxic algae growth was particularly widespread in the Hutt River with the middle and lower reaches of the river off limits for swimming for much of the summer.

Early in the New Year three dogs died after coming into contact with toxic algal mats in the Silverstream and Kennedy Good Bridge areas. Moderate amounts of blue-green algal growth were also recorded in the Wainuiomata, Waikanae and Waipoua rivers. Health warning signs were put up along the length of the Hutt River and along affected parts of other rivers from early January until the end of March. For more information on toxic blue-green algae go to <http://www.gw.govt.nz/toxic-algae>.



Last summer, warning signs – such as this one – were put up at the Hutt River at Silverstream where there was widespread toxic algae growth.



Contrary to their name blue-green algal mats are usually dark brown or black and grow attached to rocks on the river bed. Mats that come loose from the river bed can wash up on the river bank or form floating ‘rafts’ in shallow areas.

How do you tell if it is safe to swim?

Greater Wellington uses the national microbiological water quality guidelines “traffic light” system on our website to let people know whether water is suitable for swimming, surfing and other recreational activities.

Green (surveillance) for go – sampling indicates a low health risk.

Amber (alert) for caution – sampling indicates the health risk has increased, but is still within an acceptable range.

Red (action) for stop – sampling indicates the water poses an unacceptable health risk.

What is Greater Wellington doing?

- Together with the city and district councils in the region, Greater Wellington monitors and reports on:
 - The suitability of water quality for recreation at 23 freshwater sites and 77 coastal sites around the region. At most sites the water is sampled weekly during the ‘bathing season’ (from 1 November to 31 March) and the results are assessed against the national recreational water quality guidelines so that we can advise people whether or not, from a public health perspective, the water is suitable for swimming and other forms of contact recreation.
 - The suitability of water quality for shellfish gathering at nine coastal locations.
- Together with Regional Public Health and the region’s city and district councils, Greater Wellington has produced a toxic algae information pamphlet and warning signs that can be put up where there is a risk to river users.

What can you do?

- Keep stock, especially cattle and deer, out of rivers and streams to prevent them fouling the water.
- Avoid swimming during and shortly after rain and in rivers where toxic algal mats are present.

More information

The information on this card is a summary of the 2007/08 annual recreational water quality monitoring report which is available on our website at www.gw.govt.nz/envreports. If you would like more information about recreational water quality, visit our website at www.gw.govt.nz/on-the-beaches or contact:

Summer Warr (Environmental Scientist, Water Quality)
Phone: 04 384 5708 Email: summer.warr@gw.govt.nz