Beach bathing water quality monitoring programme

The following has been extracted from the Ministry for the Environment document *Microbiological Water Quality Guidelines for Marine and Freshwater Recreational Areas* published in June 2003. It is available under *publications* at www.mfe.govt.nz (document number 474, ISBN: 0-478-24091-0).

These guidelines propose a three-tier management framework based on bacteriological indicator values:

Surveillance - involves routine (e.g. weekly) sampling of bacteriological levels

Alert – requires investigation of the causes of the elevated levels and increased sampling to enable the risks to bathers to be more accurately assessed

Action – requires the local authority and health authorities to warn the public that the beach is considered unsuitable for recreation.

Surveillance (routine monitoring)

Under the surveillance condition, beaches graded Good, Fair or Poor have the potential to be affected by faecal contamination events, and routine monitoring (e.g. weekly sampling) must continue.

Alert mode: single samples

The alert mode is triggered when a single bacteriological sample exceeds a predetermined value. Under alert mode, sampling frequency should be increased to daily, and catchment assessment data referred to for potential faecal sources. A sanitary survey should then be undertaken to positively identify the sources of contamination and the potential management

Action mode: consecutive samples

The action mode is triggered when two consecutive single samples (within 24 hours) exceed a pre-determined value. Under the action mode, the local authority and health authorities warn the public, using appropriate methods, that the beach is unsuitable for recreation and arrange for the local authority to erect signs at the beach warning the public of a health danger.

The results of TRC's monitoring at Ngamotu Beach and other New Plymouth Beaches during the 2023-24 season are shown below:

Overall warning status by site		Surveillance mode	Alert mode	Action mode																		
		Wet	Dry	Recent rain	Wet	Recent rain	Dry	Recent rain	Wet	Recent rain	Dry	Dry	Dry	Recent rain	Wet	Dry	Dry	Dry				
	Site Name	7/11/2023	14/11/2023	21/11/2023	28/11/2023	5/12/2023	12/12/2023	19/12/2023	27/12/2023	3/01/2024	9/01/2024	16/01/2024	23/01/2024	30/01/2024	7/02/2024	13/02/2024	20/02/2024	27/02/2024	5/03/2024	12/03/2024	19/03/2024	26/03/2024
SEA902001	Bell Block Beach	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Action	Alert	Surveillance	Surveillance
SEA902025	Fitzroy Beach	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Alert	Surveillance	Surveillance	Surveillance
SEA902035	East End Beach	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Alert	Surveillance	Alert	Surveillance	Surveillance	Surveillance										
SEA902062	Ngamotu Beach	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Action	Alert	Alert	Surveillance	Surveillance	Surveillance
SEA902070	Back Beach	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Alert	Surveillance	Surveillance	Surveillance	Surveillance	Surveillance	Alert	Surveillance	Surveillance	Alert	Action	Action	Action	Surveillance	Surveillance	Surveillance