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Report to the Rural Services and Wairarapa Committee
from Graham Sevicke-Jones, Section Leader, Resource Investigations

Coastal and Freshwater Bathing Water Quality in Wairarapa

1. Purpose

To report to the Committee on the results of the recreational water quality monitoring for the period November 2000 to March 2001. This report covers both Marine and Freshwaters.

2. Background

Two main sources of legislation define the requirement for recreational water quality monitoring, the RMA and Health Act, although they do not explicitly define responsibilities for beach water quality monitoring and reporting.

The principal sections of the acts that are most relevant are:

- Section's 30, 35, 55 and 57 of the RMA, and
- Section 23 of the Health Act.

The monitoring of the recreational waters by the council is an important function, and can be used to monitor the effectiveness of plan implementation and to assist in safeguarding public health and the environment.

Monitoring of recreational water quality has been carried out for a number of years, principally at the marine sites (over 7 years at some sites) but in recent times including the freshwater sites (3 years).

3. Objectives

- Determine the suitability of the coastal water and selected freshwater sites for recreational bathing;
- Assist in safeguarding public health and the environment;

- Provide a mechanism to determine the effectiveness of plans;
- Provide a baseline for future studies (State of the Environment Monitoring), and to provide information to assist in determination of spatial and temporal changes; and
- Provide information to assist in targeted investigations where remediation or mitigation of poor water quality is identified.

4. Methods

The main report has been broken down into 2 components, that being the freshwater and marine components. The marine results have then been further analysed using the Annapolis Protocol (see Attachment 1).

Suitability for bathing is assessed using the MfE & MoH guidelines for recreational water quality.

Sites surveyed during this season are listed below.

Part 1 of the report presents the results of the freshwater programme. The indicator used here is the bacteria *E. coli*.

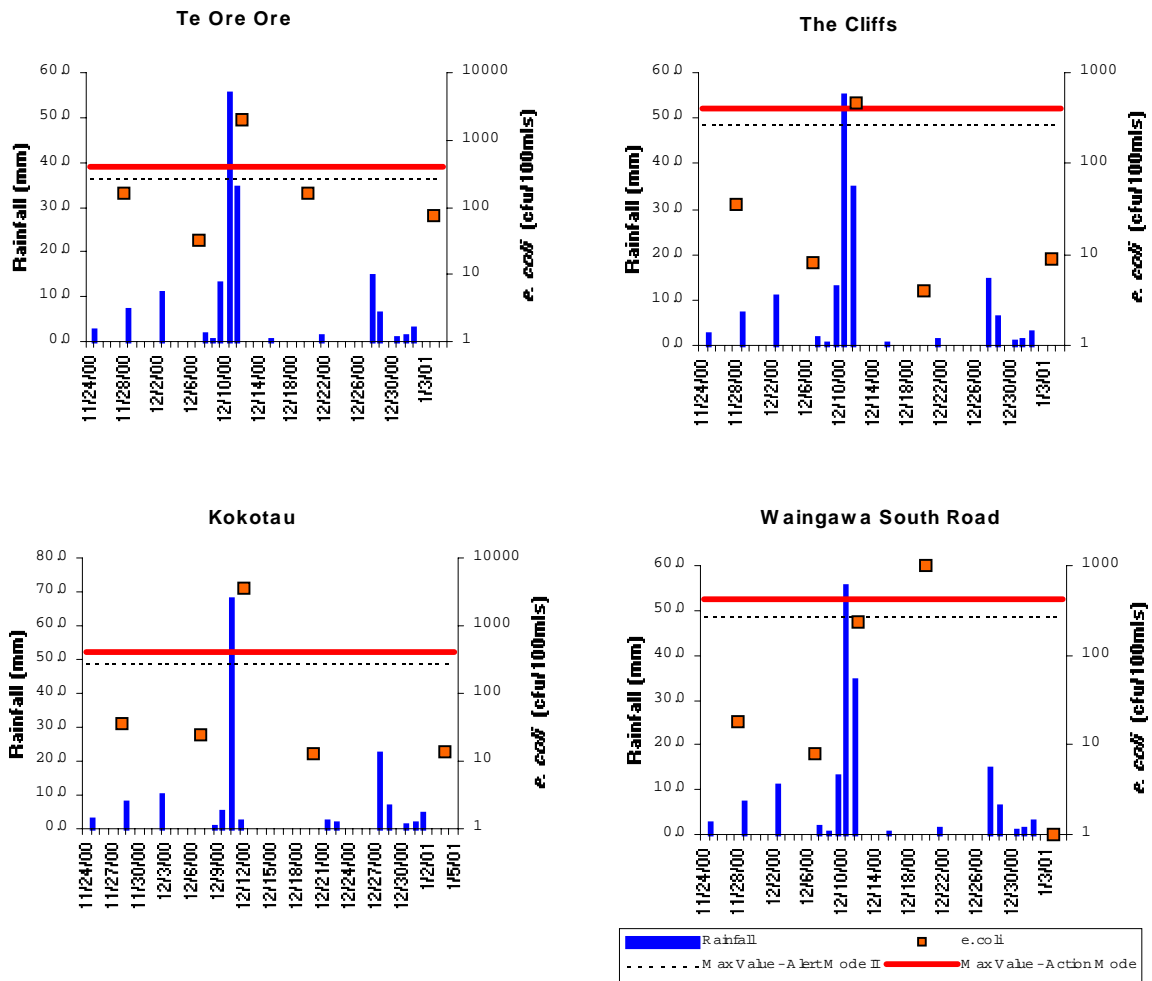
Part 2 focuses on coastal recreational waters:

- Results from the coastal programme (Part 2a). The indicator used here is the bacteria enterococci
- Summary of catchment assessments of Castlepoint and Riversdale beaches, to identify possible sources of faecal contamination (Part 2b)
- Application of the Annapolis Protocol to Castlepoint and Riversdale beaches, using the results from Parts 2a and 2b to classify the beaches according to their suitability for contact recreation.

5. Results & Discussion

Median <i>E.coli</i> for the swimming season:		
	1999/2000	2000/01
Double Bridges	63	45
Te Ore Ore	130	60
The Cliffs	23	18
Kokotau	42	33
Morisons Bush	5	11
Waihenga	17	10
Waingawa	4	5
Waingawa SR	18	11
Waiohine Gauge	1	0
Waiohine SH2	2	2

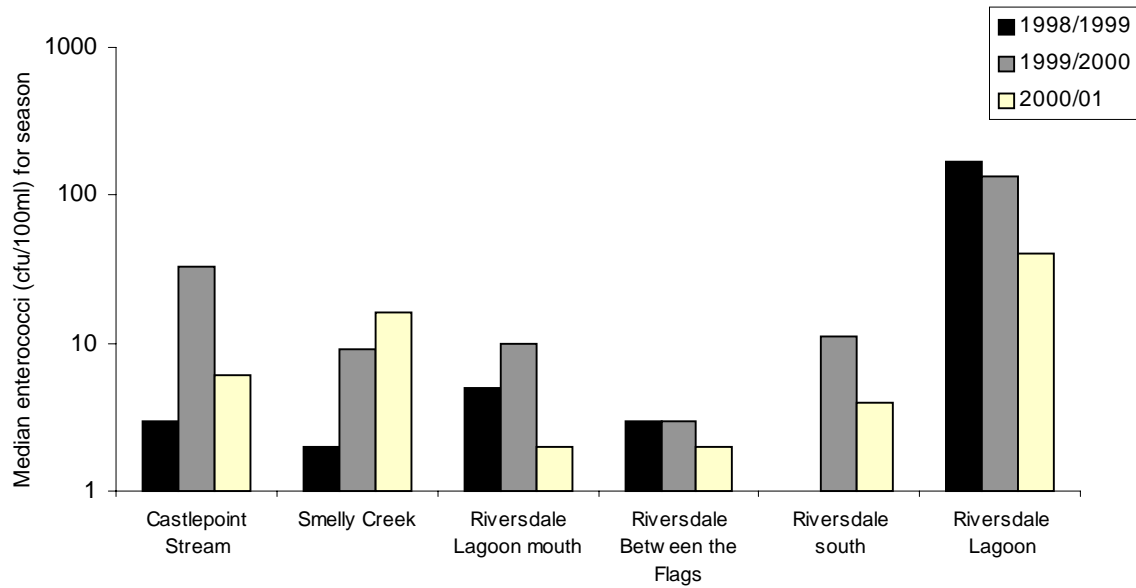
Freshwater



Freshwater quality at all Wairarapa monitoring sites complied with the seasonal median Recreational Water Quality Guidelines. Therefore in terms of bacteriological water quality these sites are considered suitable for contact recreation. Fewer breaches of The Guidelines were observed than for the 1999/2000 swimming season. The few occasions of single-sample exceedances (4) of the 410 cfu/100ml threshold appear to be as a result of runoff from rainfall events.

Marine

All coastal sites monitored complied with The Recreational Water Quality Guidelines during the 2000/01 swimming season. Therefore, in terms of bacteriological water quality, these sites are safe for contact recreation. Median results for this season were generally lower than previous seasons at Riversdale, although this pattern was not observed at Castlepoint.



Annapolis Summary.

	Castlepoint Beach at:		Riversdale Beach at:		
	Castlepoint Stream mouth	Smelly Creek mouth	Lagoon mouth	Between the Flags	Riversdale South
SIC	HIGH	HIGH	MODERATE	HIGH	HIGH
Initial SFRC	GOOD	FAIR	N/A	FAIR	FAIR
Recent SFRC	FAIR	FAIR	N/A	N/A	N/A

With further monitoring (as only limited data was available for this analysis due to changes in indicator organisms) the value of this approach will be to better portray the risk of the beach environment (in terms of health risk) to the public. It also enables for the inclusion of changes that may occur as a result of plan implementation. Those beaches that classify as good to excellent will be able to be promoted for their value as bathing areas with the additional benefit of lower monitoring costs.

6. Communication

The full report will be provided to each District Council, Area Health and the Ministry for the Environment to assist the Marine Working Group on the guideline revisions. This report will also be made available to the Wairarapa newspapers.

7. Recommendation

That the report be received.

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