

Report 99.249

File K/5/5/5

3 June 1999

P/CouncilR/Env/99.249

Report to the Environment Committee
from Alison Berry, Resource Scientist

Annual Coastal Quality Report: Western Wellington Region 1998/99

1. Purpose

To present the results of the baseline coastal water quality monitoring programme undertaken in the Western Wellington Region during 1998/99.

2. Background

This report provides a summary of the coastal water quality monitoring that was carried out in the Western Wellington Region from March 1998 to February 1999.

The objectives of the coastal water quality monitoring programme are to:

- Provide information on the baseline quality of coastal water around the western Wellington Region.
- Identify spatial trends in the quality of coastal waters.
- Assess compliance with the Council's coastal water quality objectives and identify areas where maintenance or enhancement of coastal water quality is necessary.
- Quantify potentially important surface water quality issues in the Region.
- Provide information to contribute to the evaluation of the effectiveness of the policies and strategies relevant to coastal water quality.
- Provide data that can be used for making appropriate effects based decisions on coastal permit applications.
- Identify and monitor potential stresses on the quality of coastal water throughout the Region.

3. **Methods**

The Council's baseline coastal water quality monitoring network comprises 64 sites extending from Otaki Beach on the Kapiti Coast to the Orongorongo River mouth on the Wainuimata coast. Two microbial indicators were used to assess the suitability of waters for shellfish gathering and contact recreation purposes of management. These were faecal coliforms and enterococci.

4. **Results**

The results in the year from March 1998 to February 1999 are presented in detail in the report "Annual Coastal Water Quality Report for the Western Wellington Region 1998/99". (Copies of the report will be available at the meeting if Councillors are interested). The key findings are:

- Water at 3 of 14 sites at locations managed for shellfish gathering purposes did not meet the shellfish gathering water quality guideline.
- Water at 13 of the 64 sites monitored did not meet the contact recreation water quality guideline during the sampling year.
- The highest bacteria levels were recorded near stream mouths and stormwater outlets.
- High bacteria levels were generally caused by stormwater discharges, rural runoff, and illegal discharges.
- The biggest success for the year has been the reduction of bacteria levels at Hataitai Beach, Wellington.

5. **Implications**

The findings of the Annual Coastal Water Quality Report have raised several key issues.

- (1) At some sites water quality objectives are not being achieved because of the effects of stormwater and river discharges.

The Proposed Regional Coastal Plan for the Wellington Region sets out purposes of management (either contact recreation or shellfish gathering) for coastal waters around the Region. At some sites the water quality guidelines appropriate for these purposes are not being met. The most common cause is stormwater and river discharges. Discharges of stormwater into coastal waters, rivers and streams are permitted activities.

- (2) Some stormwater and river discharges have high bacteria levels. Run-off from both urban and rural areas typically contains high levels of bacteria. These bacteria occur from both animal (e.g. stock, birds, dogs etc.) and human sources (e.g. septic tanks, sewage). The Regional Council and territorial authorities have already identified and addressed many sources of contamination in some problem areas. However, in other areas the

sources of contamination are yet to be fully investigated. Methods for reducing bacteria levels in stormwater need to be identified and implemented.

- (3) Comparisons made between Regional Council results and results from territorial authorities raise questions about whether some of our sites are truly representative of local water quality.

Some of our monitoring sites are located close to discharges. The results obtained at these sites may not be representative of water quality across a whole beach. The location of some of our monitoring sites need to be re-evaluated to ensure that they are representative of local water quality.

- (4) The extent of contamination across beaches is not known because we usually have only one site at each beach. The nature and extent of coastal water contamination across beaches where water quality is a problem could be investigated as targeted studies.

6. **Further Action**

The following actions will be taken to address the issues raised in the Annual Coastal Water Quality Report:

- (1) A project which examines the effects of stormwater discharges on surface water and the adequacy of existing rules to control stormwater will be included for consideration in the LTFS process.
- (2) Illegal discharges will be identified through surveillance projects and addressed through the consent or enforcement processes.
- (3) A riparian management working group will continue to examine, and where appropriate, implement methods for improving water quality and aquatic habitat various riparian management practises.
- (4) The Coastal Water Quality Baseline Monitoring programme will be reviewed during 1999/00.
- (5) A targeted investigation examining the nature and extent of poor coastal water quality at one of the problem areas will be considered for inclusion in the 1999/00 work programme.

7. **Regional Policy Statement Implementation**

Coastal water quality monitoring helps implement methods in the Regional Policy Statement. Methods 22, 24 and 25 of the Regional Policy Statement require that the Wellington Regional Council identifies waters requiring improvement, and provides advice to consent holders and the public as to how this might be achieved.

8. Communications

The main findings of the report will be communicated to the public through a press release. Each territorial authority will also receive a copy of the report. The Regional Council discussed the results extensively with the territorial authorities during the preparation of the report.

9. Recommendation

That the report be received and the contents noted.

Report prepared by:

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