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Report to Environment Committee
from John Sherriff, Manager Resource Investigations

Mangapouri Stream Investigation Update

1. Purpose

To provide the Committee with an update about investigations into the cause of high faecal coliform levels in Mangapouri Stream, Otaki.

2. Background

A targeted investigation of Waitohu Stream undertaken in 2000 identified poor water quality in its main tributary, the Mangapouri Stream. In response to this finding the Regional Council undertook further sampling to attempt to identify the cause and source of the poor water quality.

Results of sampling undertaken in July and September 2000, reported to the Committee in October 2000, showed very high levels of faecal coliform contamination in the vicinity of County Road. Several potential contamination sources were identified. These included a sewage leak from the reticulated sewerage system, and runoff from the Otaki Racecourse. Further investigation and water sampling was undertaken to try and pin point the exact source of the faecal contaminants.

The possibility of a potential sewage leak was discussed with Kapiti Coast District Council and they indicated that they would carry out a dye test to check the integrity of their sewerage system.

Regional Council staff put their effort into undertaking investigations to identify other possible sources.

3. **Dye Test of the Sewerage System**

Regional Council staff met with Kapiti Coast District Council staff on 24 April. At this meeting it was revealed that no dye test has yet been done on the sewerage system in the vicinity of Mangapouri Stream. During that meeting KCDC staff committed to undertaking such a test. We were subsequently advised that this test would occur in the last week of April.

4. **Results of Further Water Quality Sampling**

Further water quality sampling was undertaken by Regional Council staff in October 2000. This sampling concentrated on the area in the vicinity of County Road, where previous high results were found and was designed to try and narrow down the location at which the high level of contamination was occurring.

The results for samples taken on 5 October 2000 were:

Site	Result
Haraita St Otaki	3,000 CFU/100ml
20 m downstream of SH1	5,000 CFU/100ml
Immediately downstream SH1, Waitohu	10,000 CFU/100ml

The results for samples taken on 10 October 2000 were:

Site	Result
Tributary	1,400 CFU/100ml
Downstream of County Road	144,000 CFU/100ml

The results for samples taken on 24 October 2000 were:

Site	Result
Mangapouri @ County Road	19,000 CFU/100ml
Upstream of County Road	12,000 CFU/100ml

The guideline for primary contact (swimming and other activities involving direct contact with the water) is 150 faecal coliforms/100ml, the guideline for secondary contact (boating and fishing) is 1000 faecal coliforms/100ml.

5. **Conclusions**

These results have enabled us to narrow down the source of the faecal contamination to the general vicinity of County Road. Extensive investigations of the area upstream of County Road have failed to identify any specific source of this contamination.

The high levels and continuous nature of contamination suggest that the source is most probably a sewage leak. A sewage pump station adjacent to Mangapouri Stream has

now been identified as a probable source. The dye tests to be undertaken by KCDC will include this pump station.

6. **Public Health Issues**

The responsibility for managing the public health issues that arise from this contamination rests with Kapiti Coast District Council and the Regional Public Health Service. Both parties have been kept up to date with the findings of our investigations.

On October 19 the WRC issued a joint press release with the Medical Officer of Health warning the public not to swim or take food from the stream.

Notices have also been placed in local newspapers by Kapiti Coast District Council warning people about taking watercress from Mangapouri Stream.

The Health Officers have stated that because of the physical characteristics of the stream there is little risk of people using the stream for recreational purposes.

7. **Where To From Here?**

What we do from here hinges on the outcome of the KCDC dye tests. If these tests show a sewage leak is occurring, KCDC will have to fix the problem. If the tests show that sewerage system is not the source of contamination we will undertake more investigations to try and identify the source.

The outcome of the KCDC tests should be known by the time the Environment Committee meets. A verbal progress report will be provided at the committee meeting.

8. **Recommendation**

That the information be received and noted

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