Resource Investigations Department Report John Sherriff, Manager

September 1999

1. Introduction

With the start of a new financial year several new projects are being implemented. Some of these are highlighted below:

Targeted Investigation of the Waikanae Paraparaumu Unconfined Aquifer:

This project will involve staff from the Consents Management Department, and the Resource Investigations Department. It is aimed at improving compliance monitoring of shallow bores drilled in the Waikanae/Paraparaumu area and collecting baseline groundwater quality and quantity data on the unconfined aquifer in the Waikanae and Raumati/Paekakariki groundwater zones.

Moera Aquifer Monitoring Bore (aka the millennium hole)

This project will involve the construction and development of a deep monitoring bore (150m) in the Moera Aquifer, Lower Hutt.

Targeted Coastal Water Quality Investigation

This project will examine the long shore effects of a river or stormwater discharge on coastal water quality. We have yet to confirm the exact location for this investigation.

Munitions Sites

Our contaminated sites programme will continue with a project involving the preparation of site histories for sites within the Region that were used for disposing of munitions at the end of WWII. This project was identified as a priority in the Proposed Regional Discharges to Land Plan.

2. **Resource Information**

A summary of the floodwarning callouts and special weather bulletins received over the past six years is provided below.

2.1 **Telemetry System Callouts**

20-21 August	Rainfall Alarms - Cemetery, Phillips, McIntosh, Oriwa,	
	Taungata, Kakapanui, Warwicks, Te Marua	
	River alarms – Waikanae, Otaki, Waitohu, Kaitoke, Te	
	Marua, Birchville, Akatarawa	

2.2 Special Weather Bulletins

19-21 August	Strong wind and heav	y rainfall in the Tararuas

2.3 **Other Matters**

We are in the process of making changes to our flood warning system. These changes involve moving our telemetry radio repeater from Kapakapanui to a site near Otaki. This will result in more reliable communications during flood events and reduced servicing costs.

The Meteorological Station at Shandon Golf Course is operational. Staff will demonstrate its capabilities to the Committee during the morning tea break of the meeting.

3. **Resource Analysis**

3.1 State of the Environment Report

The final draft of the State of the Environment Report has been completed and the report is now with our publisher. Because of the importance of this document, we are arranging a formal launch in early November.

3.2 **Groundwater Levels**

Hutt Groundwater Levels were close to maximum recorded levels during May and early June, but falling below average from mid-June to mid-July due to increased municipal demand. Levels have subsequently recovered to above average.



Data for the Kapiti Coast since the end of June is not currently available because scheduled monitoring has not yet been completed. During June, levels seemed to be recovering after being fairly low during summer. It is assumed that, due to relatively low rainfall over winter, the level will have remained slightly below normal until last weekends deluge and may well be racing up to average right now

3.3 **River Flows**

After below average rainfall across the western Wellington Region during June, rainfall figures for July were back to around average. Consequently river flows were also maintained at average levels.

The first heavy rain since mid-June occurred on 20th and 21st August. Up to 300 millimetres of rain fell on the western side of the Tararua Ranges with up 450mm falling on the eastern side. The flood base was operational throughout the Friday night and Saturday morning as rainfall intensity alarms were triggered around the Tararua Ranges and foothills and river levels began to rise.

Flood flows in the magnitude of a two-year return period event occurred in the Hutt River, as measured at Kaitoke, and the Waikanae River.

3.4 **Freshwater Quality Report**

Alison Berry, our Water Quality Scientist left the Council on August 27 for the greener pastures of environmental consulting. She is now working for Tonkin and Taylor in Auckland.

The lead role in preparing the Annual Freshwater Quality Report has been taken up by Brett Stansfield from our Wairarapa office. This will be the first joint water quality report (incorporating work done by both the Environment and Wairarapa Divisions) prepared by the Council.

3.5 Air Quality

Stage two of the air emissions inventory has been completed. A report on the interim findings of this project will be reported to the Committee at this meeting.

4. **Resource Quality**

4.1 **Pollution and Non-compliance Complaints**

The summary of pollution complaints is now being presented as a stand alone report later in the order paper.

4.2 Environmental Education Workshop

Staff attended a workshop on environmental education on 8 July 199 at the Island Bay Marine Education Centre, along with staff from the Marine Education Centre, Parliamentary Commissioner for the Environment' Office, Department of Conservation and Territorial Authorities. This was essentially a show and tell session and enabled staff to find out what other organisations were up to.

4.3 Zero Waste Workshop.

Cr Gibson and Mary Manastryski, Resource Quality Officer, attended a workshop on Zero-Waste. The purpose of the workshop was to promote waste reduction.