#### CHRISTCHURCH CITY COUNCIL

### NOTES OF A SEMINAR MEETING OF THE COUNCIL

# Held in the No 3 Committee Room, Civic Offices on Tuesday 7 March 2006 at 9.30am

PRESENT: City Council

Councillor Carole Evans (Chairperson),

Councillors Helen Broughton, Sally Buck, Barry Corbett, Graham Condon, David Cox, Pat Harrow, Bob Shearing,

Gail Sheriff, Sue Wells and Norm Withers.

**Environment Canterbury** Councillor Richard Budd

**APOLOGIES:** Apologies for absence were received and accepted from

Mayor Garry Moore, Councillor Anna Crighton and

Yani Johanson (Community Board).

# 1. THE WATER BENEATH OUR FEET (SAFEGUARDING OUR DRINKING WATER FOR FUTURE GENERATIONS)

Jenny Ridgen, Environmental Scientist, introduced the approach being taken to prevent groundwater contamination within the Christchurch Groundwater Recharge Zone.

#### **Recharge Zone - Aquifers and Water Quality**

Raymond Ford, Environment Canterbury, provided a PowerPoint presentation covering:

- Why do we value Christchurch City's drinking water?
- CCC reticulated system water use graph
- Christchurch City decentralised water supply map
- Geological map of the lower Waimakariri River plan
- Cross section through the aquifer system plan
- Aguifer use for the year June 2004
- Distribution of wells
- Direction of groundwater flow
- Centralised cross section geology of the aquifer system
- Groundwater flow aquifer zero
- Groundwater flow in the upper aquifers
- Thickness of surface fine sediments
- Aquifer 1 unconfined to confine transition
- Proposed CGRZ boundaries
- Approaches to protecting groundwater quality

#### **Groundwater Quality**

Barry Loe, Loe Pearce and Associates, continued the Power Point presentation with a series of maps and diagrams covering:

- Total dissolve solids in wells 15-45 metres deep
- Hydrocarbon samples from wells 15-45 metres deep
- Point source contamination
- Non-point source contamination
- Overlapping contaminant plumes
- Multi barrier approach to a typical community water supply
- Multi barrier approach and the Christchurch City water supply

### **Drinking Water Standards 2005**

Simon Collin, Planning Manager, provided information on the Christchurch City's Water Supply Scheme covering:

- Background
- Effect of DWSNZ 2005
- Monitoring and Risk Management Plan

# The Christchurch Aquifer Recharge Zone

Malcolm Walker, of the CPH, provided information in a PowerPoint presentation covering:

- CPH's Draft Policy Statement
- Overview
- What is secure groundwater?
- Issues arising from security criteria
- Draft Policy Summary

Questions and comments were made in respect of:

- Was the quantities of water extracted by other aquifer users a mirror image of Christchurch residents?
- How far out in the ocean did the freshwater flow?
- Did the large number of wells sunk in some zones contribute to the possible contamination profile?
- Why were certain parts of the city boggy?
- What depth were the wells that had been contaminated sunk to?
- Were the saltwater wells deteriorating further?
- What was the composition of the water being tested?
- Did the proposed Central Plains Irrigation Scheme impact on Christchurch's water?
- How did the Council know where contamination had occurred?
- The location of new wells could be at risk depending on what is planned in Selwyn District.

- Was there a possibility of Christchurch's water supply running out?
- A large number of horticultural wells were no longer used.
- The grading of the water supply did not reflect the quality of Christchurch's water.
- What did 22 non-secure wells in north area actually mean?
- How much mixing of the different waters is there?
- Other local authorities in New Zealand also had untreated water.
- Was it possible to introduce another standard that recognised the quality of Christchurch's water?
- Would deepening the wells in the north-west area overcome current problems?
- The Council should be exploiting the Christchurch water quality.
- Residents were seeking protection for Christchurch's water supply for future generations, not just now.
- Our water needed to be kept secure from large companies who might through their land purchase prevent access and control rivers etc.
- What was the ratio of rainwater to river water?
- The possibility of future farming practices could impose on the supply.
- It was essential to protect catchment areas.
- Should there be no development at all in the recharge areas?

## **Summary/Outcome**

Jenny Ridgen concluded the seminar by commenting that the message was that the bar has been raised in terms of protection. There are a number of issues to be addressed including a review of the City Plan from a public health aspect.

The seminar concluded at 11.47am