

File: B/9/2/5

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07 May 2001

«LastName»
«JobTitle»
« Company»
«(Address 1»
«City»

Dear «FirstName»

Water Supply in an Emergency

At the recent customer meeting at the Regional Council Centre there was a discussion about wholesale water supply in an emergency.

When there is a water supply problem the first thing the Regional Council would do is contact those customers who may be effected and also **inform** our other customers of the situation. The usual type of the emergency does not involve our entire network because of the levels of system redundancy.

The situation could arise in a major earthquake where there is damage to our pipelines, water treatment plants and structures carrying our pipelines across rivers and streams. Under this scenario it is likely to be either days or weeks before the system is restored, even in a relatively limited way. Hopefully the earthquake valves installed in some of the customer reservoirs will respond as predicted, retaining most of the water which was in the reservoir at the time of the earthquake. Even on a rationed basis this water can only last a relatively short period of time.

The key issue then is how is water to be distributed from collection points which could be for example the wellfield in Knights Road, Lower Hutt, or water stored in the Te Marua lakes, to the various households. Even with a minimal distribution of 10 litres per person per day there is still 3500m³ of water to be delivered on a daily basis. Obviously as treatment plants and pipelines are restored then the points where water is available will be closer to where it is needed.

It seems apparent that the public will expect the local authorities to make arrangements for water supply in some form, if pipelines are not available. What we are seeking in the first instance, is what planning, if any, each of the cities has undertaken to collect water from supply points in the event that the Regional Council cannot make water available to your various reservoirs? We will coordinate the responses and then instigate further discussions with you.

Yours sincerely

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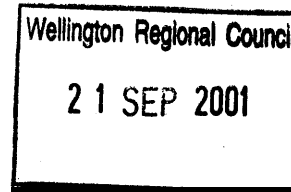
M D KENNEDY
Strategy and Asset Manager

WELLINGTON CITY COUNCIL

PO Box 2199, 101 Wakefield Street, Wellington, New Zealand. Ph 64-4-499 4444



20 September 2001



FILE REF:	
B	9/2/5
NAME	Int/Date
M. Kennedy	AS
D. Benham	JS
TO ACTION:	

Murray Kennedy
Strategy and Asset Manager
Wellington Regional Council
PO Box 11 646
WELLINGTON

Dear Murray

Water Supply in an Emergency

Reference your letter of 7 May and our various conversations since that date.

Wellington City Council has no contingency in its continuity planning to cover the collection of water from outside the City's main points of supply in an emergency that disrupts Regional Council's water treatment or distribution system.

The City Council's planning is focussed on the supply of water within the city network. It has been assumed that in an emergency, Regional Council remains responsible for providing adequate water quantities to these main points of supply, and your own emergency planning includes whatever actions are necessary.

From our discussions, I understand that the necessary level of emergency planning has not been carried out and the responsibilities of both councils in an emergency are not clear. That is of concern to this council and needs to be addressed. It is also possible that a similar situation applies to the Hutt and Porirua City Councils.

I would like to see the issue resolved and suggest the first step would be for you to sponsor a meeting with the councils concerned to identify responsibilities for water supply in an emergency and planning options and actions needed. There may also be aspects of network emergency planning that would benefit from a more common approach.

I also note that **there is** no document in place that covers the supply of water by the Regional Council. This may be an appropriate time to revisit the Wholesale Water Agreement that was proposed 2 years ago.

Yours sincerely

Tony Shaw
Manager Major Projects



HUTT CITY
COUNCIL

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Private Bag 31912, Lower Hutt
New Zealand
<http://www.huttcity.govt.nz>

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Group/Division: water Services
Telephone: 04-570-6886
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E-Mail: omeara@huttcity.govt.nz
Our Reference: WS80-12-01

Wellington Regional Council
28 AUG 2001

27 August 2001

Murray Kennedy
Strategy and Asset Manager
Wellington Regional Council
PO Box 11-646
WELLINGTON

FILE REF:	
B	9/2/5
NAME	Int/Date
M. Kennedy	<i>[Signature]</i>
D. Benham	<i>[Signature]</i>
TO ACTION:	

Dear Murray

WATER SUPPLY IN AN EMERGENCY

Further to your letter dated 7 May 2001 on this subject, I make the following comment. I apologise for the delay in responding but as previously advised I needed to consult with other parties on this matter before responding.

I have consulted with Council's Emergency Management Controller (Brian Toomey) on the structure and responsibilities of the respective authorities for supplying water to the community. Brian has advised that under the current legislation the authorities currently responsible for supplying water to the community would be expected to continue to do so in an emergency situation, ie. the onus is on the Wellington Regional Council (WRC) to supply bulk water to the respective Cities and for the Cities to distribute that water to their communities. Obviously the severity of the emergency would restrict the respective authorities ability to carry out their normal functions, however Brian informs me it is the authorities responsibility to have adequate contingencies in place to provide a minimal service in such an event.

Hutt City has installed auto shut off valves at key reservoirs in the majority of the supply zones to prevent water from running to waste in an extreme earthquake event. Remaining key reservoirs are programmed to have auto shut off valves installed over the next three years. The expectation is that the community will have access to drinking water from these reservoirs for a number of days after an event. Access to drinking water from the artesian aquifer may also be possible from defined bores throughout the City, depending on the extent of damage the aquifer sustains. However, ultimately the community would expect that bulk water would be supplied by the WRC to predetermined points within each City for distribution.

71358

You have raised an important issue on the supply of water to the community beyond the immediate days after a major event. I believe it would be beneficial for the TA's and the WRC to meet in the near future to discuss the issue and seek to define each parties expectations and the associated contingency measures that could be put in place.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Gary O'Meara', with a large, sweeping loop at the end.

Gary O'Meara
WATER SUPPLY MANAGER



01 JUN 2001

FILE REF:	
B/9/2/5	
NAME	Int/Date
D. Benham.	
M. Kennedy	26/6
TO ACTION:	

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Mr M D Kennedy
Strategy and Asset Manager
Wellington Regional Council
PO Box 11 646
WELLINGTON

File: 329/1/3
LKW:JMS
kennedy

29 May 2001

Dear Murray

WATER SUPPLY IN AN EMERGENCY

I refer to your letter of 7 May 2001 seeking information on what planning we have carried out for the collection of water from supply points in the event that the Regional Council cannot make water available to our various reservoirs.

We are in the process of reviewing our supply of water in an emergency which includes the options of delivery by tanker truck from our reservoirs, supply direct from our reservoir sites and maybe limited supply from mains where they are still functioning. Our scenarios at this stage did not include having to pick up the water from say the lakes at Te Marua. Our planning has been based upon Wellington Regional Council being able to re-supply our reservoirs before our storage was exhausted. I must admit that I am concerned that you consider it could take weeks before your system is restored even in a relatively limited way. Hopefully, with Upper Hutt being closer to the source of supply, the time to supply into our reservoirs may be considerably shorter. I believe that you have to look very closely at your recovery procedures if you are talking weeks, as the feasibility of supplying from tankers must be fairly limited. Within Upper Hutt we have 4 or 5 trucks that service the rural area taking water from selected fire hydrants within the City. But with your figures of 10 litres per person per day, those trucks would be required to make about fourteen deliveries each per day just for Upper Hutt.

The available storage in our reservoirs at 75% full is about 25,000 cubic metres. For 10 litres per head per day this volume is adequate for 67 days. Under the World Health Organisation guidelines of 3 litres per head per day, the storage would be significantly more. Provided the earthquake valves work as planned we are probably in a reasonable state of preparedness but maybe the policy on the minimum volume of water stored needs reviewing to ensure that the best risk assessment is in place.

Yours faithfully

Lachlan Wallach
DIRECTOR, OPERATIONS



In reply please quote: EN5/2/1
For enquires please contact: John Oldfield
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Direct Dial: 04 237-1416

14 MAY 2001

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Cobham Court
Porirua City

11 May2001

Wellington Regional Council
P O Box 11-646
Wellington

Attention: Murray Kennedy, Strategy and Asset Manager

Dear Murray

WATER SUPPLY IN AN EMERGENCY

We write in reply to your letter of 7th May concerning responsibility for supplying water to Porirua City and other councils after a major disruption to the regions water supply.

This Council has developed plans to retain water within some of its service reservoirs to ensure a very limited supply after a disruption assumed to be caused by a significant earthquake. At the time of writing eight reservoirs have had seismic valves installed. Council's planning concentrates on distributing water from these reservoirs and repairing the city reticulation.

You may remember my raising this issue of WRC's response to earthquakes at a previous meeting, more particularly at planning for repairing broken trunk mains. Marshall Hyland of this office has also queried this matter more recently when he attended a meeting on civil defence issues.

It has been our expectation that your organisation would have a plan to reinstate supply to the four retail suppliers as soon as practicable, and that this plan would include measures to supply water to the service reservoirs or first reticulation branch as may be the case. Porirua City has not planned to collect water further back up the supply chain.

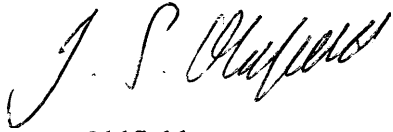
We have clearly relied on the provisions of section 38(3) of the Wellington Regional Water Board Act 1972. This section identifies the point of supply to be the inlet of the service reservoir or to the first reticulation branch. As stated above we have assumed in our planning that your organisation would have addressed this most important point in developing your response strategy to an earthquake of sufficient magnitude to disrupt water supplies within the region.

It is obvious that all parties would need to act in concert to recover supply as soon as practicable, however it is our opinion that WRC's planning should deal quite clearly with how it can best meet its obligations under the Water Board Act.

67034

We are willing to work together to discuss this matter further when you have had time to consider this response and those of other councils.

Yours faithfully

A handwritten signature in black ink, appearing to read "J. S. Oldfield". The signature is written in a cursive style with a large initial "J" and a long, sweeping underline.

J S Oldfield
For T M Davin
GENERAL MANAGER UTILITIES POLICY
FOR CHIEF EXECUTIVE