

Report to the Utility Services Committee  
from Murray Kennedy, Strategy and Asset Manager

## **Risk Policy**

### **1. Purpose**

To obtain the Committee's approval of The Water Group's Risk Policy.

### **2. Background**

A risk management report (98.492) was submitted to the Committee in November 1998 (see **Attachment 1**). The first step in preparing a risk policy was to consult with our customers. Essentially the consultation was about the degree of redundancy in the water supply system and the security of supply.

### **3. Customer Consultation**

Two customers replied promptly that the wholesale water supplies ability to cope with a 1 in 50 year drought situation was acceptable. Also, the current water treatment plant security of supply is acceptable. Another customer has indicated through the recent Annual Plan process that they may be reluctant to see new infrastructure built to maintain a 1 in 50 year security of supply. This implies they are prepared to see minor water shortages more frequently than 1 in 50 years. The fourth customer has not formally replied but expressed a verbal view there is no need to bring forward the planning for new infrastructure to achieve a level of security greater than 1 year in 50. Although this does not represent a true consensus by the customers, it could be concluded there is no need to bring forward the construction of new capital works for water treatment or security of supply. New facilities are currently planned for about 2020 assuming the population of the four cities reaches 375,000 by then.

### **4. Treatment Plant Security of Supply**

A tentative security level of N-1 was outlined in report 98.490. This means any one of the three water treatment plants (Te Marua, Waterloo, Wainuiomata) could be out

of service and the base demand of 150ML/day still met with some of the supply coming from the Gear Island pumping station. As report 98.490 mentioned, under very dry conditions in summer the maximum amount available could drop to 120ML/day if one treatment plant is not available. An N-1 standard can be adopted, as it is not out of step with our customer's requirements.

## **5. Security of Raw Water Supply**

Report 98.528 recommended a tentative policy of having sufficient raw water available to meet demand, unless a drought situation with a return period of every 50 years, or longer, arose. With the present population in metropolitan Wellington there are sufficient water sources available to cope with a drought having a return period of once in every 200 years. The degree of security decreases until it reaches one in 50 years when the population has increased to 375,000. This assumes the per capita annual consumption does not change as the population increases.

The current situation appears to satisfy our customer's needs and in the long term they are comfortable with a 1 in 50 year, or lesser level of security. Accordingly, a level of security of supply for raw water of not less than one in 50 years can be adopted.

## **6. Risk Policy**

A Risk Policy has been prepared (**Attachment 2**). This incorporates the water treatment plant security of supply and the raw water security of supply. The base demand though has been reduced to 110 ML/day so the water treatment plants can still satisfy demand during a greater range of events than just a plant failure. The lower figure of 110 ML/day in the risk policy will still meet the public health needs of the Community.

There are other risks besides water quality and quantity and these have been incorporated in the policy.

Once adopted the policy then becomes the working document for operating the water supply system.

## **7. Environment**

There are no separate environmental considerations. The policy incorporates the ISO 14001 requirements.

## **8. Communications**

Apart from advising our customers if the policy is adopted, there is no other communication issues.

**9. Recommendations**

*That the Committee approve The Water Group's Risk Policy as attached.*

Report prepared by:

Approved by:

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**Attachments**

Attachment 1: Report 98.492 – Risk Management Programme

Attachment 2: WRC, The Water Group, Risk Policy