



Waikato regional freshwater discussion

Matapaki wai māori ki Waikato

Let's talk water!

INTRODUCTION

Water is our most precious resource and the Waikato Regional Council has a strong history of managing it.

Our freshwater is nearing its allocable limits and its quality is being impacted on by such things as land use, discharges of various types and a changing climate.

It's clear more needs to be done to protect the quantity and quality of our freshwater now and into the future, as the demands on it are expected to grow.

So we've started looking at our use of freshwater to develop a strategy that will allow our water to be best used to accommodate cultural, commercial and community expectations and requirements over the next 30 to 50 years.

PRIORITIES FOR OUR DISCUSSION

The strategy will guide the identification of principles, processes and mechanisms to ensure water in the Waikato region is managed sustainably, equitably and profitably into the future. It will:

- look at all the different uses for freshwater
- help to develop a future framework for the most efficient allocation of water
- be adaptable to the changing environmental and economic circumstances
- identify gaps in the knowledge required to successfully manage freshwater for the community
- identify possible legislation changes, data collection and management, and technology options for the most efficient management of water.



INFLUENCES ON WATER

Freshwater is our region's greatest asset. Climate change and other factors are putting increasing pressure on both supply and demand.

1

Rainfall

Climate change means more extreme events like droughts and floods.

2

Land use

Different land cover affects water differently. Trees with deep roots provide soil conservation benefits - grass on hillsides allows rainfall to rapidly flow off.

3

Soil pollution

Intensifying land use can contaminate soil and groundwater with excessive nutrients and agrichemicals.

4

Groundwater

Can be used directly from wells or flow into streams, rivers and lakes via seeps and springs.

5

Wetlands

Act like sponges, creating temporary lakes in times of high rainfall and feeding streams and recharging groundwater in the dry.

6

Additional storage

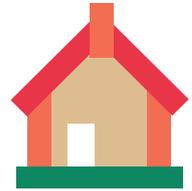
Water tanks and dams.



7

Fresh water

Provides for habitat, amenity, sediment transport, fish migration, recreation, food gathering, ecosystems, iwi rights and interests, and hydro dams.



INFLUENCES ON DEMAND

1

Discharges

Come in two forms: point sources from pipes and diffuse from land use. Both need volume in the receiving water body to assimilate contaminants.

2

Drinking water

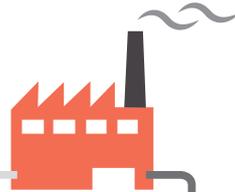
For people and animals.



3

Industry

Takes water either directly from surface water, groundwater or urban reticulated supply. Treated waste waters are discharged to the environment or urban systems.



4

Climate change

Projected increases in temperature and wind combined with less rainfall, will increase demand for water.



Increased evaporation will dry out soils especially peat.



5

Irrigation

Pasture/horticulture.



6

Urban supply

Urban population increase will need to use water more efficiently.



7

Estuaries

Waters are home to kaimoana such as oysters and mussels.



So how do we best use our water?