

# WATER AS A STRATEGIC RESOURCE

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## Policy

Water New Zealand believes that fresh water is a key strategic resource for the nation, and it should be treated as such as a matter of public policy.

While freshwater supply is under increasing pressure internationally, New Zealand has an abundance of the resource, which is likely to provide this country with increasing competitive advantage in the international marketplace in the future.

## Explanation

Abundant fresh water is a highly valuable resource for a variety of economic, social, cultural and environmental reasons, but changes are occurring in both its supply and demand. The future prosperity of all regions is inextricably linked to water quality, quantity and equitable allocation.

Current trends point to severe pressure being put on water resources internationally. Whether there is sufficient fresh water to meet future demand is of increasing concern.

Climatic variation is changing patterns of availability and water is becoming more polluted. Supply is also constrained by cumbersome allocation regimes across much of the globe, along with inefficient use.

Increased demand is occurring as a result of population pressure, urbanisation and economic growth. These factors are placing increasing pressure on both the resource and its sustainable management.

With a trebling of the world's human population over the past century, water use per capita has increased six fold over the same period. Demographic projections are for a 50% increase in human population in the next 40 years and a steady state not being reached until 2150.

This growth has resulted in over 50% of annual water runoff now being withdrawn from natural waterways for food production and human use. Seventy per cent of this is used mainly for irrigation of arable and pastoral farmland; 22% is used in industry, and 8% is used for domestic consumption.

Urbanisation is increasing with more people now living in urban environs rather than rurally. It is predicted that 60% of the world's population will be urbanised by 2030. Urban populations generally don't grow their own food and require potable water supply and waste water removal and treatment.

New Zealand's rainfall averages two metres annually, compared with the world average of 0.8 metres. Annual water runoff in New Zealand is 80,000 cubic metres per head per year; many times the world average.

Relatively, water is also more accessible in New Zealand. Proportions of freshwater stored as surface and accessible groundwater are respectively 100 times and 2 fold higher than averages across the globe.

It is estimated that less than 3% of annual water runoff is abstracted from New Zealand's ground and surface waterways. Actual abstraction figures are difficult to determine, but this will change as a result of the introduction of mandatory metering for most water takes.

Concepts such as water foot printing and virtual water, will, like carbon foot printing, receive increasing attention in public policy debate going forward.

Food production is inextricably tied to water availability. New Zealand's biological economic base is reliant on its abundant water resource.

As one of only a handful of upper income net food exporting countries, New Zealand is well placed to further develop its water resource, lift productivity, enhance environmental protection, and trade food surpluses.

This will increasingly provide the nation with competitive advantage. As such, water should be considered a key strategic resource for New Zealand.