The qualitative grading of supplies to communities smaller than 500 people is not considered to be economic, although this threshold may drop over time to include more 'at-risk' communities. The proposed standard could be applied to smaller drinking-water supplies, in the same way that existing voluntary guidelines are applied.

Council will work along side MoH to avoid subjecting the public to two tiers level of regulation.

4.8 Future growth

4.8.1 Reticulated

Demand Management

The majority of water use in Wellington is for residential purposes with an estimated usage of 450 litres of water per person, each day. Currently Council purchases around 29,866 mega litres (ML) of water each year from GWRC, at a cost of approximately \$12,000,000.



At present, the region has sufficient water resources to be able to meet the current demand from Council (on average 53% of the GWRC's water supply is used by Wellington City) and the other three cities, although GWRC was under strain in 2003 during drought conditions. Recent GWRC research has stated that if the recent rate of population growth continues, as from 2007, they would be unable to supply sufficient potable water during 1 in 50-year drought conditions.

GWRC has decided to focus on reducing the demand for water, rather than building new facilities, as the response to any increase in bulk demand, as a new raw water supply infrastructure will cost millions of dollars.

Construction of Aramoana Reservoir

Development

Individual infill buildings do not have a significant effect on the peak volumes of required water but the gradual incremental increase can ultimately have a significant effect on levels of service.

There is also an increasing demand on Council to allow developments in areas that do not have sufficient water capacity and pressures. This has been considered carefully and a policy on developer contributions has been adopted by Council to consider developments meeting the cost of any system improvements and so existing customers do not have a reduction in service levels.

A review of the water distribution requirements of the Northern Growth area concluded that three new reservoirs are required to adequately service existing and future development. Construction of these reservoirs would enable a number of small inefficient reservoirs to be replaced.

A new pumping station connected to the bulk main in the motorway would service development to the east and west of the area. A new reservoir of 3,000 cubic metres capacity will be constructed on the eastern side of the motorway to service 900 new and 400 existing lots. From this reservoir water will be pumped to a second new reservoir in Horokiwi with the capacity to service 450 lots. This facility would enable 90% of Horokiwi residents to be connected to reticulated water. A third reservoir with a capacity of 2,200 cubic metres will be constructed in Stebbings Valley to service development.

4.8.2 Non-reticulated

Development

Current population levels in the non-reticulated communities mean that current individual systems to collect water are adequate. Future development may require Council to take a role in promoting community schemes because of the potential health risks posed by individual systems and to be more environmentally sustainable. It is recommended that any future subdivisions have clauses in building and resource consents binding the developer to take methods deemed adequate to manage any health risk.

Diverting spring and tributary water supply for household use, thereby reducing the minimum flow level of Karori stream, may be an issue if further development takes place, this will be taken into consideration and the risk assessed by GWRC in the resource consent process linked to subdivisions.

Across all the non-reticulated communities there are particular areas of concern regarding subdivisions. Understandably the community response is that only a slow rate of change should be allowed to occur. Most existing residents considered that the current system to require notified resource consents (in most cases) for subdivision and new housing was acceptable to achieving the wider objective relating to rural character and amenity.

The communities feel in any future development, water and wastewater should be managed adequately on-site and not connected to the reticulated Council supply. A feasibility study conducted in 2003 investigated the validity of reticulating Makara village from Karori West. This estimated the cost at \$0.5 million.

4.9 Outcomes of Consultation for Water

Councillors would like to see information gathered on private water supplies in collaboration with Regional Public Health.

The Medical Officer of Health recommends checking Council procedures to determine if chlorine dosing and flushing can be included as per the EHO's recommendation.

The Medical Officer of Health recommends that Council fully investigate potential public health risks from rainwater harvesting and greywater recycling e.g. cross-contamination with reticulated drinking water supplies. There may be legal implications/barriers to introducing these practices in urban communities. Whilst encouraging future use of greywater systems, RPH want WCC to consider the potential for cross contamination of potable water from poorly designed or managed greywater systems and recommend introducing effective mitigation measures to prevent this occurring.

RPH consider it important that potential health risks to residents using non-reticulated water supplies are minimised. RPH therefore strongly support the recommendation to investigate a code of practice for private rainwater systems, and further recommend that this be extended to all private water systems e.g. sourced from stream water, bores and rainwater. They also support the provision of education on risks associated with non-reticulated water supplies and the gathering of information on non-reticulated supplies.

RPH supports WCC's proposal to contribute to the Wellington Water Management Plan to help conserve water to prevent potential future water shortage issues.