

Waimea Water Management Catchments Values and Objectives Summary

April 2015

Note on interpretation

Unless otherwise stated, both maori and english terms are used in these value descriptions and management objectives to encompass all cultures and all spiritualities.

For example, the use of the term Wai Tapu (sacred waters) is used to identify waters held in highest regard by both maori and non-maori, and both secular and non-secular view points.

The aim of this approach is to achieve an all-inclusive definition of the values and objectives, while utilising the succinct nature of maori terms relating to water and water management which often describe complex concepts that have no simple direct english translation, but whose fundamental principals are shared by others.

At the Feb meeting it was asked that the order of the maori-english translations be consistent – however after further post-meeting consideration of this, staff are recommending the original order of terms be retained, as some concepts have come from a largely maori perspective (eg mauri) while others are from an all-cultures perspective (eg rituals). Changing the order may lead to reader confusion as to whether these terms are discussing solely maori concepts or being used in an all cultures/all spiritualities sense.

Cultural and Spiritual Values - Description

What this value means:

Healthy water is vital for our well-being, energy and peace of mind. We respect and treasure our waters, Wahi Tapu (sacred places) and Wai Tapu (sacred waters) where rituals and ceremonies (tikanga) are performed. Our well-being is reflected by the health of our waters. The purity and health of our water supports our connection with nature and Papatuanuku (earth mother). It imbues peace of mind and revitalising energy and allows for cultural and spiritual rituals and uses. Individuals and families are able to enjoy and connect with our water bodies now and in the future.

Further explanation of meanings:

Rituals and ceremonies include, but are not limited to: tohi /baptism, karakia/prayer, waerea (protective incantation), whakatapu (placing of raahui (restriction)), whakanoa (removal of raahui), and tuku iho (gifting of knowledge and resources for future generations).

In providing for this value, the wai tapu is free from human and animal waste, contaminants and excess sediment, with valued features and unique properties of the wai protected to some extent. Other matters that may be important are that identified catchments have integrity (there is no artificial mixing of the wai tapu) and identified taonga in the wai are protected.

Cultural and Spiritual Values Management Objectives

- Our water bodies have healthy mauri (vital energy).
- Those water bodies which do not have a healthy mauri are enhanced over time.
- The quality and wairua (spirit) of water is suitable for cultural and spiritual uses and rituals (tikanga).
- Wai tapu sites are acknowledged and protected

Applies to: All surface and groundwater

Municipal & Domestic Water Supply - Description

What this value means:

"Water supply (Wai Māori) – freshwater can meet people's potable water needs. Water quality and quantity enables domestic water supply to be safe for drinking with, or in some areas without, treatment."

Municipal and Domestic Water Supply Management Objectives

Surface water bodies that are used for drinking water are sufficiently abundant to meet the domestic needs of users and are easily and affordably managed or treated to meet the New Zealand Drinking Water Standards.

Applies to: All surface water used for drinking water - with treatment as required

Groundwater used for drinking water is sufficiently abundant to meet the domestic needs of users and meets the New Zealand Drinking Water Standards without the need for treatment.

Applies to: All groundwater used for drinking including: Upper Confined, Lower Confined, Appleby Gravel and Hope Aquifers - without treatment when taken from a secure bore*

(*As per NZDWS a secure bore is free from surface influences and free from contamination by harmful micro-organisms, with water abstracted via a protected bore head. It excludes water from springs and unconfined aquifers with bore intake screens less than 10m deep)

Municipal and Domestic Water Supply Management Objectives [new]

Surface and ground water that does not normally require treatment to be suitable for use as drinking water, is protected from *contamination*¹ which may make the water unpalatable or unsuitable for human consumption without treatment.

Applies to: All surface and ground water used for drinking water which does not normally require treatment

Surface and ground water that normally requires treatment to be suitable for use as drinking water is protected from *contamination*¹ which may require additional drinkingwater treatment to make it palatable or suitable for human consumption.

Applies to: All surface and ground water used for drinking water which normally requires treatment

1- as defined by the Health Act 1956 Part 2A Drinking Water - Section 69G

After identifying several potential difficulties with the previous wording of the management objectives for water supply, staff have suggested this alternative which effectively looks to maintain the current situation and ties in with definitions used in the Health Act regarding

drinking water.

Ecosystem Health – Description

(compulsory under NOF)

What this value means:

Water is essential to functioning and provides for all life. It is vital that our natural resources, including rivers and streams, springs, coastal areas and river bank vegetation, are protected and maintained in a healthy state, with healthy mauri (vital energy), and that the freshwater supports healthy ecosystems.

Further explanation of meanings:

In a healthy freshwater ecosystem ecological processes are maintained, there is a range and diversity of indigenous flora and fauna, and there is resilience to change.

Matters to take into account for a healthy freshwater ecosystem include the management of adverse effects on flora and fauna of contaminants, changes in freshwater chemistry, excessive nutrients, algal blooms, high sediment levels, high temperatures, low oxygen, invasive species, and changes in flow regime. Other matters to take into account include the essential habitat needs of flora and fauna, the relationship of riparian and wetland vegetation, substrate, meander, width/depth diversity and bank shape to aquatic and riparian fauna needs and to water quality, and the connections between water bodies. The health of flora and fauna may be indicated by measures of macro invertebrate species.

Ecosystem Health

Management Objectives (Schedule 30B)

Water quality meets the needs of aquatic organisms, including native fish and trout.

Applies to: Surface waters: Waimea (except in the Waimea River when step three rationing imposed under a 'no-dam' scenario), Wairoa, Roding, Lee and Wai-iti rivers (and their tributaries)

Water quality maintains or improves aquatic ecosystems in coastal springs.

Applies to: Groundwaters: UCA and AGUA;

Surface Waters: Neimann, Pearl and O'Connors Creeks

• Water quality maintains or improves aquatic ecosystems in the Waimea Inlet

Applies to: Freshwaters where they flow into the Waimea Inlet (including Waimea River, Neimann, Pearl, O'Connors and Borck Creeks, Richmond urban streams)

• There is good habitat diversity, including riparian and wetland vegetation, bed/bank substrate, meander, width/depth, floodplain connectivity and bank shape suitable to aquagic and riparian fauna needs.

Applies to: All rivers, streams, springs and wetlands

Fishing and Food Gathering - Description

What this value means:

Fishing, and gathering of freshwater and coastal food and resources, are important for our families, our wellbeing and our connectedness to the sea and land. Kai (food) must be safe to harvest and eat. Mahinga Kai (resource gathering places) must have healthy mauri (vital energy) and support food species and resources allowed to be gathered and eaten. Being able to fish or gather food and resources at traditional and favorite locations is important and needs to be maintained for future generations.

Further explanation of meanings:

Mahinga kai (resource gathering places) generally refers to places that have traditionally been used for gathering indigenous freshwater species, food, tools, or other resources. Mahinga kai provide food for the people of the rohe and the community and these sites give an indication of the overall health of the catchment.

For this value, kai (food) is safe to harvest and eat and knowledge transfer is present (intergenerational harvest). In waters that are highly valued for providing mahinga kai, the desired species are plentiful enough for long-term harvest and the range of desired species is present across all life stages.

For this value, freshwater resources are available and able to be used for customary use at some places (but not everywhere). In waters that are highly valued for providing mahinga kai, resources are available for use, customary practices able to be exercised to the extent desired, and tikanga and preferred methods are able to be practised.

For waters valued for fishing, the numbers of fish would be sufficient and suitable for human consumption. In some areas, fish abundance and diversity would provide a range in species and size of fish, and algal growth, water clarity and safety would be satisfactory for fishers. Attributes will need to be specific to fish species such as salmon, trout, eels, lamprey, or whitebait.

Fishing and Food Gathering Management Objectives (schedule 30B)

• Water quality meets the needs for the harvesting and consumption of food and gathering of resources.

Applies to:

Surface waters, including Waimea River(except in the Waimea River when step three rationing is imposed under a 'no-dam' scenario), Wairoa, Roding, Lee, and Wai-iti Rivers.

Freshwaters where they flow into the Waimea Inlet

(including Waimea River, Neimann, Pearl, O'Connors and Borck Creeks, Richmond urban streams and the small coastal streams.)

Livelihood and Economic Use - Description

What this value means:

Water of sufficient quality and quantity is important for human consumption, farming, horticulture and tourism livelihoods and for community wellbeing. Freshwater meets the needs of irrigation, food production, and stock water and provides economic opportunities to people, businesses and industries. Water storage can improve security of supply.

Further explanation of meanings:

Water quality and quantity would be suitable for irrigation needs, including supporting the cultivation of food crops, the production of food from domesticated animals, non-food crops such as fibre and timber, pasture, sports fields and recreational areas. Attributes will need to be specific to irrigation and food production requirements.

Water quality and quantity would meet the needs of stock.

Water quality and quantity can provide for commercial and industrial activities, if available and sustainable. Attributes will need to be specific to commercial or industrial requirements.

Livelihood and Economic Use

Management Objectives (Schedule 30B)

- Water quality meets the needs of abstractive users, including human consumption, irrigation and food production and stock water supplies.
- Water is used efficiently and water quality is maintained or enhanced to meet the needs of future generations.

Applies to:

Groundwater: Upper Confined, Lower Confined, Hope and Appleby Gravel Aquifers (for irrigation and food production, stock and farm water, industrial uses)

Surface waters:

Waimea (except in the Waimea River when step three rationing is imposed under a 'no-dam' scenario - for irrigation and food production, stock and farm water-except when step three rationing imposed)

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Wairoa, Roading, Lee Rivers (for stock and farm water)

Wai-iti River (for irrigation and food production, stock and farm water)

Recreation - Description

(compulsory for secondary contact under NOF)

What this value means:

Recreation activities in the Waimea catchments and estuary include swimming, fishing, kayaking, water skiing and boating. Recreation is important for well-being. It provides enjoyment and refreshes the mind and body. It is an important social activity.

Further explanation of meanings:

As a minimum, the freshwater will present no more than a moderate risk of infection to people when they are wading or boating or involved in similar activities that involve only occasional immersion in the water. Other contaminants or toxins, such as toxic algae, would not be present in such quantities that they would harm people's health.

In freshwater where a community values more frequent immersion in the water such as swimming and kayaking, the risk of infection will be no more than moderate. In some freshwater, the risk of infection to people undertaking any activity would be no greater than what would exist there under natural conditions.

Recreation

Management Objectives (schedule 30B)

- All surface waters are safe for secondary contact recreation.
- All surface waters are safe for swimming during the months Nov – April (except during flood flows)

Applies to: All surface waters (except in the Waimea River when step three rationing imposed under a 'no-dam' scenario)