



# Takaka Water Management Catchments Values and Objectives Summary

March 2015

# 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 ~~restored~~ enhanced over time.
- Surface and ground water is suitable for cultural and spiritual uses and rituals (tikanga).

### Applies to: All surface and groundwater

- Wai Tapu (sacred waters) are not degraded by human and animal waste discharges, contaminants and excess sediment.
- Valued features, taonga (treasures) and unique properties of water at Wai Tapu are maintained and protected.

### Wai tapu applies to: All springs including: Te Waikoropupu Springs, Fish Springs, Takaka Oxbow Spring, Springbrook Spring and Spitalls Spring.

#### *Further explanation of meanings:*

*(Suggested definition) Wai tapu are waters that we hold in the highest regard. They may be sacred or holy or highly valued for a particular aspect. In a secular sense these are more than just special or important waters, and may include those considered as nationally or internationally significant which are renown for one or more features or characteristics.*

*- Need to find out the tangata whenua perspective on this definition. May need further consideration of wai tapu implications.*

# Municipal & Domestic Water Supply - Description

**What this value means:**

*“Water supply (Wai Māori) – The 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 - 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)*

# Ecosystem Health – Description

(compulsory under NOF)

## **What this value means:**

The Takaka catchments have a special environment with rare and unique qualities. From the dynamic estuaries, to the karst and marble areas, and bush-clad national park catchments, 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.* <sup>6</sup>

# Ecosystem Health

## Management Objectives

- All surface and ground waters have healthy mauri (vital energy).
- There is a diversity of indigenous flora and fauna and a range of life stages expected for the water body type.
- Water quality provides at least the minimum requirements for healthy, functioning and resilient aquatic populations (population dynamics, feeding, growth and breeding are occurring within expected ranges for the water body type).

Applies to: All surface and groundwater – including rivers, streams, springs, groundwater, wetlands and coastal areas affected by freshwater outflows.

- There is good habitat diversity, including riparian and wetland vegetation, bed/bank substrate, meander, width/depth, floodplain connectivity and bank shape suitable to aquatic 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

- Kai (food) are safe to harvest and eat.
- In locations that are highly valued mahinga kai (resource gathering sites), the desired species are plentiful enough for long-term harvest and the range of desired species is present across all life stages.
- Locations that are highly valued mahinga kai (resource gathering sites) are accessible and able to be used to the extent desired and tikanga (ritual and ceremonies) and preferred methods of harvest are able to be practised.
- All locations that are valued mahinga kai (resource gathering sites) have healthy mauri (vital energy).

**Applies to: Refer next slide**

Note: the implementation methods for such objectives will require elements outside of the scope of the FLAG project.

# Fishing and Food Gathering – Locations & Species

Applies to: surface water in:

- **Western coastal catchments** (Tukurua to Little Onehau?)-
  - whitebait species, tuna (eels)
- **Motupipi catchment**
  - whitebait species, tuna (eels), freshwater shellfish, koura
- **Takaka River**
  - whitebait species, tuna (eels), trout
- **Anatoki and Waingaro Rivers**
  - tuna (eels), trout
- **Te Waikoropupu River**
  - ?species?
- **Motupipi and Waitapu Estuaries** (where affected by river outflows)
  - Estuarine shellfish

# 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. It provides for irrigation, food production, stock water and economic opportunities for people, businesses and industries. Water storage can improve security of supply.

## *Further explanation of meanings:*

*Water quality and quantity is 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 meets 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

- There is an acceptable security of supply for water users – in some areas and for some uses this may require water storage
- Water quality is suitable for the economic uses with minimal or no treatment:
  - Water used for irrigation meets the quality needs of farming and horticulture uses
  - Water used for stock water meets the stock water drinking standards
  - Water that is important for tourism activities meets the expectations of tourists, and meets primary contact (swimming) objectives where relevant
- Water is used efficiently and water quality is maintained or enhanced to meet the needs of future generations.

Applies to: All surface and groundwater currently used for irrigation, stock water, industrial and commercial uses and tourism activities.

# Natural Form and Character- Description

## **What this value means:**

The natural values of our water bodies connect us with nature. People seek out these natural areas as they provide tranquil and spiritual opportunities away from human development. Specific natural values include the sound of flowing water, healthy water and the life within it and the wildness and dynamic nature of our rivers and estuaries. The headwaters in national park, and the karst/marble landscapes and springs, in particular Te Waikoropupu, provide a special and unique quality to the Takaka catchment.

## *Further explanation of meanings:*

*Matters contributing to the natural form and character of freshwater are its visual and physical characteristics that are valued by the community, including its flow regime, colour, clarity, morphology or location. They may be freshwater areas with exceptional, natural, and iconic aesthetic features.*

# Natural Form & Character Management Objectives

- The natural and physical characteristics of the water bodies, especially within the karst and marble landscapes, national parks and spring systems within the Takaka Catchments are maintained.
- **Applies to:** all water bodies including: Te Waikoropupu Springs, Takaka Oxbow Spring, Springbrook Spring and Spitalls Spring
- Water flows, and quality from spring systems including Te Waikoropupu Springs, Takaka Oxbow, Springbrook and Spitalls Springs are maintained.

**Applies to:** Te Waikoropupu Springs, Fish Springs, Takaka Oxbow Spring, Springbrook Spring and Spitalls Spring

# Recreation-Description

(compulsory for secondary contact under NOF)

## **What this value means:**

Swimming, fishing, kayaking and tramping are important recreational activities undertaken in the Takaka Catchment. Recreation is important for well-being. It provides enjoyment and refreshes the mind and body. It is an important social activity, particularly for families and those with favoured traditional spots for swimming or fishing. Freshwater used for recreation poses no more than a moderate risk of infection.

### *Further explanation of meanings:*

*As a minimum, the freshwater presents 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, are not 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 is no more than moderate. In some freshwater, the risk of infection to people undertaking any activity is no greater than what exists there under natural conditions.*



# Recreation - Management Objectives

- **Surface waters** are safe for swimming during the months Nov – April
- **All surface waters** are safe for secondary contact recreation.

**Applies to: All surface waters**

# Hydro-electric Power Generation - Description

## What this value means:

Renewable energy generation through hydro-electric use of water is important for economic, as well as environmental reasons.

Where freshwater is suitable for hydro electric power generation existing generation output shall be protected.

*Further explanation of meanings:*

***Hydro-electric power generation (au putea)*** – *The freshwater is suitable for hydro electric power generation.*

*Water quality and quantity and the physical qualities of the freshwater, including hydraulic gradient and flow rate, can provide for hydro-electric power generation. Existing generation output shall be protected.*

# Hydro-electric Power Generation Management Objectives

- Existing Hydro-electric power generation schemes are able to continue to generate electricity as needed and existing generation output is protected.
- The future potential for new micro and small scale hydro-electric power generation is provided for.

## **Applies to:**

**Existing:** Cobb R, Campbell Crk, Waitui Strm, Onekaka R, Rameka R, Gibson Crk, Ellis Crk, Wainui R