

Friday 5 June 2014
Healthy Rivers – CSG Presentation
Presented by Steph O'Sullivan
Environment Group Manager



### Presentation Outline

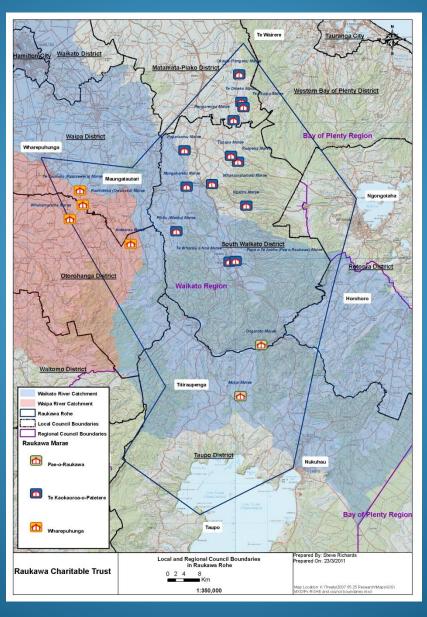
- 1. Raukawa A short background
- 2. A Different Perspective.....The Māori World View

  (How does this translate into the contemporary context..?)
- 3. The Waikato Situation Co-Management of the Waikato River
- 4. The future as we see it... what are the opportunities & challenges?

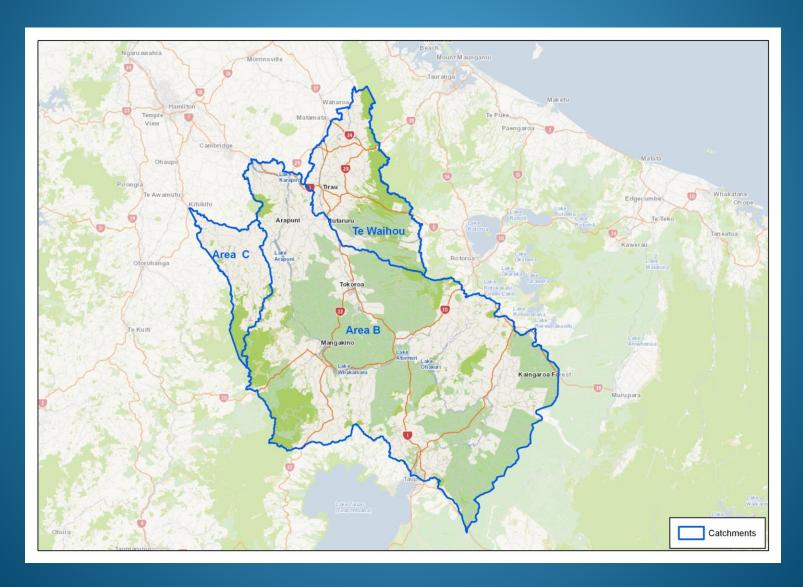




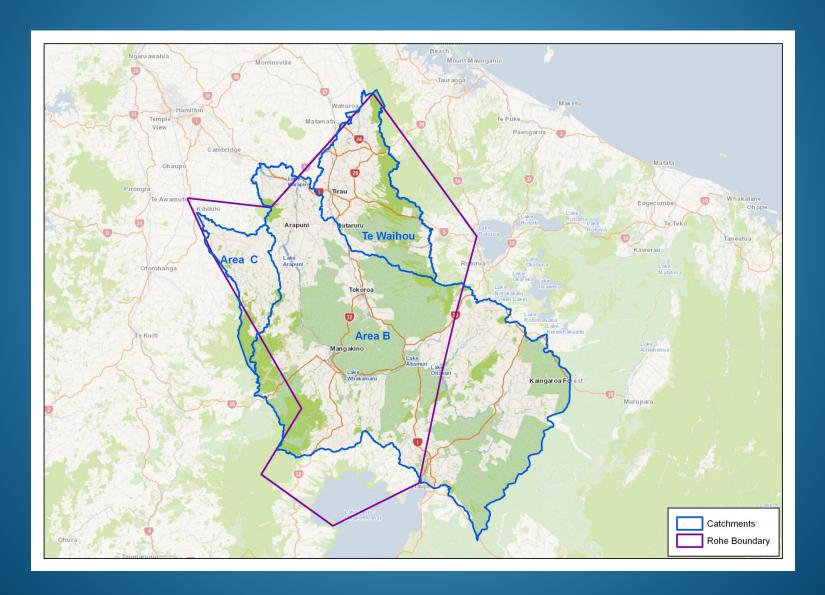
## Raukawa Rohe



# Co-Management Areas



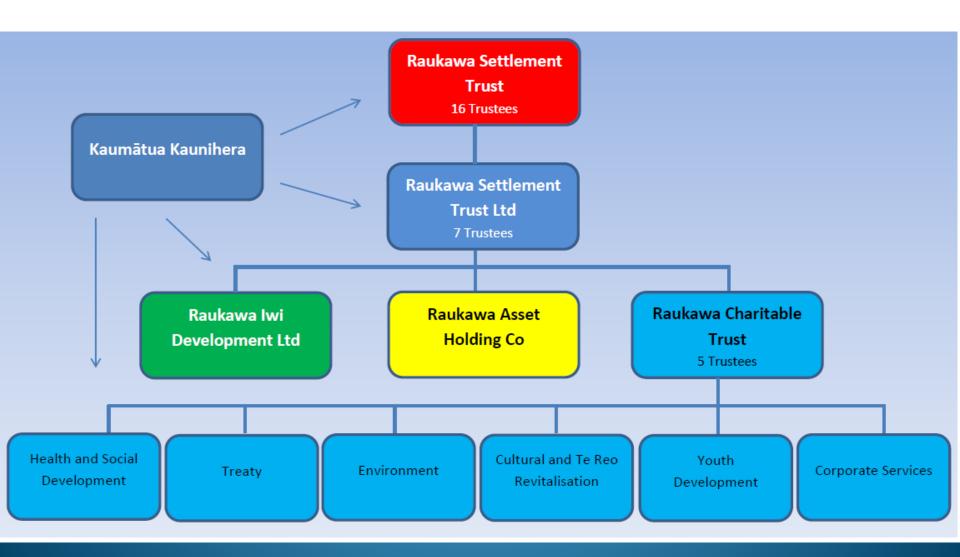
## Raukawa rohe



## The Raukawa Experience

- Raukawa have a 500 year + relationship with the Waikato, Te Waihou and Upper Waipa Rivers.
- Our historical relationship with the rivers has been a complex one; source
  of sustenance food, spiritual nurturing, cleansing, mode of transport,
  mode of communication.
- The River is in a metaphorical sense "the veins carrying the lifeblood of Raukawa".
- The River is not separate from the people but part of the people. Nor is the River separate from its surrounds. Raukawa regard the River as a whole living entity; including not just its banks, beds and waters, but its many streams, lakes, tributaries, flora and fauna, flood plains, as well as its metaphysical being.

### Raukawa Iwi Authority



### "Māori in the catchment"

- Note of caution....
- There is no 'Māori sector'
- Iwi Authorities and Māori Land trusts are separate governance entities
- Māori are tangata whenua, tax payers, urban ratepayers, farmers, foresters, land owners, community members....
- A significant piece of work for us and for you us to understand the dynamic between iwi aspirations and land trust's aspirations...
- Many Māori land blocks have missed the 'development curve' of the last 25 years, different land law (tenure), multiple owners, capacity & capability....

# Our values...



### The Beginning...

E no Io roto I te aha te ao He pouri te a o He wai katoa Kaore he ao, he marama he maramatanga. He pouri kau, He wai katoa

Io dwelt in universal space
The universe was in darkness.
Day was not, nor moon, nor light,
Darkness alone was
All was water.

Io and Wai only existed.
Io is the supreme.
In the beginning....he wai katoa...all was water.

All was water...the most ancient and tapu state of existence.

## The Beginning cont'd...

This is water in its purest state.

The second waters.....

'Tihei Mauri Ora' – the breath of life...

Wairua

The universe begins with Io-Atua (supreme God) Io-matua-kore (The parentless), and so on...

The Universe follows on with two primogenital entities...

Rangi – Sky Father Papatuanuku – Earth Mother

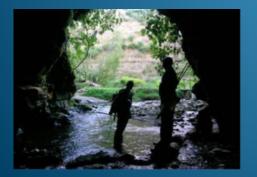


### Te Aō Māori

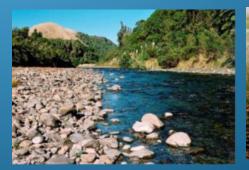
- These two parental forces begat all the forces of nature in an extended family of spiritual beings (demigods) – Tane, Tangaroa, Tawhiri Matea, and their siblings....
- Mātauranga Māori ancestral knowledge
- Tikanga is an established suite of practices of moderation, conservation, regulation and prohibition (tapu, noa and rahui)
- Tikanga the vehicle of management was built into custom, traditions, rituals and karakia of our culture.
- Harmony and balance were the purpose and objective of existence.

### The Mauri of Water

- Mauri is the 'life force' of a water body
- If the life force or 'mauri' of the water body is vital and well, in balance and healthy, we can then look to the water body for its life supporting properties. This could be linked to the western concept of "Carrying Capacity"
- Can that water body sustain itself, eco-system support functions and appropriate uses within limits?







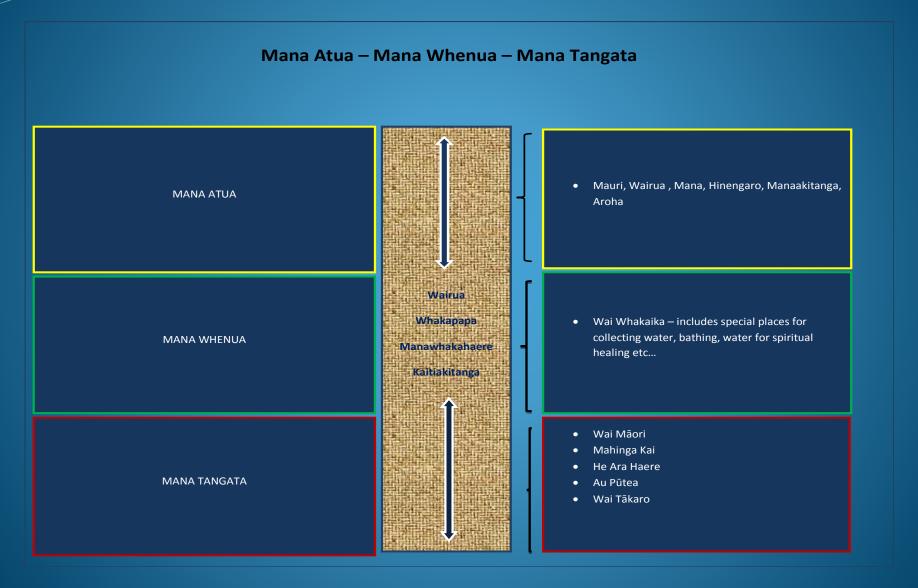


### First Principles

Principles informing the way we do business or live life:

- Kaitiakitanga Guardianship, our responsibilityto our environment, (Intergenerational)
- Wairua Spirituality as the essence of our being
- Kotahitanga Being of one mind to achieve common goals
- Rangitiratanga Chieftainship, independence of will
- Ukaipo Land as sustenance for our people
- Whanaungatanga Relationships
- Manaakitanga Caring for others
- Pukenga Being accomplished or skilled
- All recognise inter-connectedness therefore cannot separate concepts within the environment, nor people from the environment.

### Mana Atua – Mana Whenua – Mana Tangata Model



# The Contemporary Context



### Wai are limits required?

### Policy Context

- In addition to the contextual issues. LAWF, NPS on Fresh Water, local government policy changes, industry best practice, market access & security, 'NZ Inc' Image & Integrity etc..
- Treaty Settlements to restore our environment....
- Co-Management of the Waikato River –A new regime
- The Vision & Strategy for the Waikato River



# Co-management... what does it mean and our aspirations

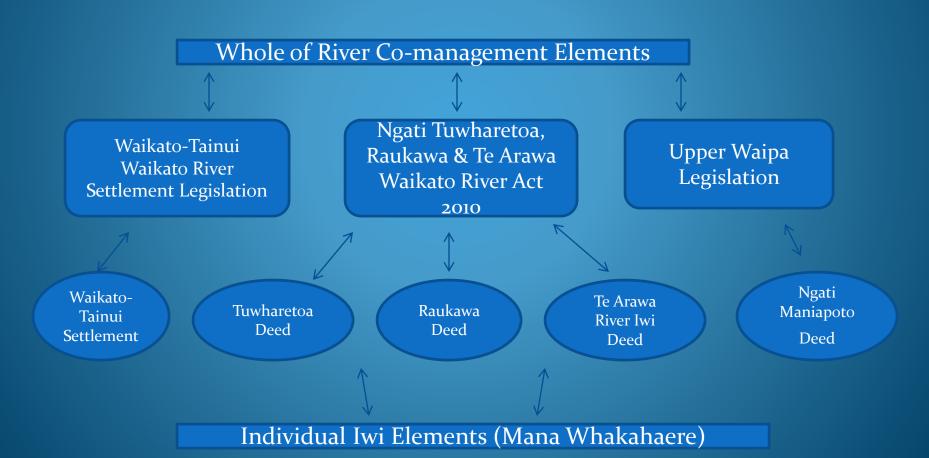
#### • Purpose:

- Re-establish relationship with River (a taonga)
- Revitalise our kaitiaki role
- Be part of decision making and processes associated with the River (governance & management)
- Improve access, fisheries, water quality, mahinga kai, rongoa Māori, cultural landscapes
- Re-focus on the River and its catchment health
- Inter-generational legacy an holistic approach



## The Co-Management Jigsaw

Overarching Co-Management Framework



# Co-Management Framework in Support of the Vision & Strategy

- Whole of River: Establishment of the Waikato River Authority Key role:
   Guardianship of the Vision & Strategy
- \$210m + Clean Up Fund (in total River Iwi have negotiated some \$400m + toward the Waikato & Waipa River Clean Up)
- River Iwi & Partners engaged in a comprehensive suite of work to give effect to our rights and responsibilities within our rohe (mana whakahaere)
   we are working hard!

### The Vision & Strategy

"Our Vision is for a future where a healthy Waikato River sustains abundant life and prosperous communities who, in turn, are all responsible for restoring and protecting the health and wellbeing of the Waikato River, and all it embraces for generations to come"...







## The Vision & Strategy Cont'd

- 13 Objectives & 12 Strategies
- Looking for substantial progress over 20 years....
- Vision & Strategy deemed into Regional Policy Statement, (RPS must be consistent with the V & S) other plans & policies must 'give effect to'
- Another NPS cannot be inconsistent with the V & S, and if there is inconsistency, the V & S prevails.

# 3 Key Objectives

- The recognition that the Waikato River is degraded and should not be required to absorb further degradation as a result of human activities
- The recognition that the strategic importance of the Waikato River to NZ's social, cultural, environmental and economic wellbeing is subject to the restoration and protection of the health and wellbeing of the Waikato River
- The restoration of water quality within the Waikato River so that it is safe for people to swim in and take food from its entire length.
- Other Objectives requiring change:
  - The adoption of a precautionary approach
  - The recognition and avoidance of cumulative effects...
  - Integrated, holistic & co-ordinated approach to maangement

### Health & Wellbeing of the Waikato River'

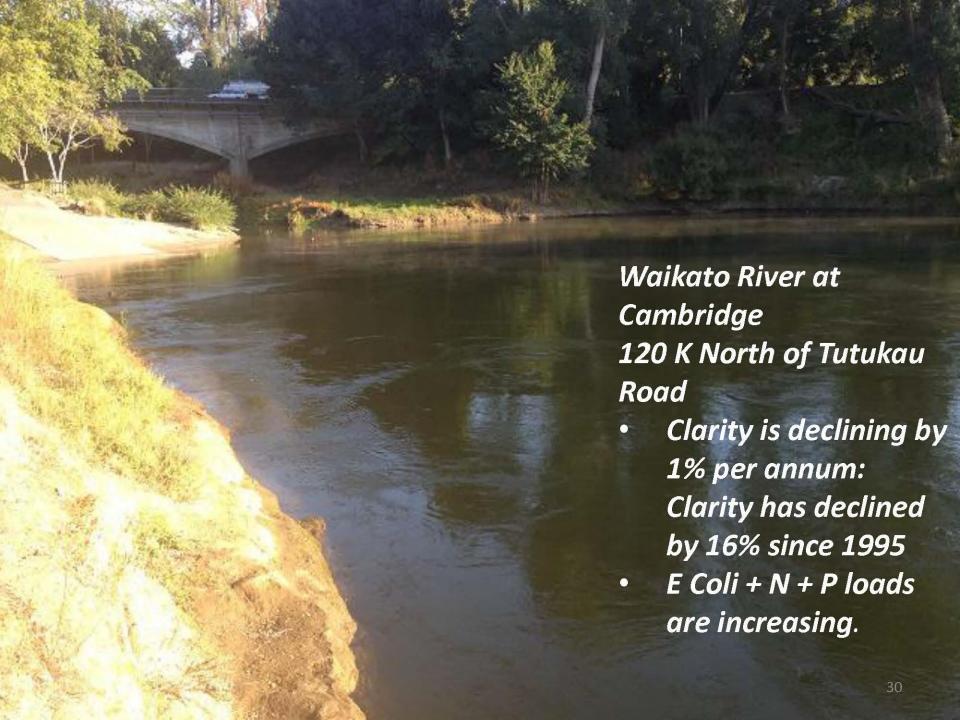
- Is not just about <u>water quality</u>, it is holistic...
  - Water use (quantity)
  - Diffuse discharges (nitrogen / phosphorus)
  - Sediment
  - Physical habitat degradation e.g. wetlands
  - Natural character
  - People's Reconnection with the river
  - Access
  - The Mauri of the River and tributaries...
  - A note to self maybe.. Healthy Rivers Plan change is part of a wider suite of work...

# What's it like 'Up River'?









## Biggest Challenges...

- Continued land use change pine to pasture, sheep/beef to dairy support...
- V6 Ag Working Group another 20,000ha of dairying in the Upper Waikato next 20 years
- Some where between 10-15,000 has been converted to dairy already...
   cumulative impacts
- Increased Intensification of land use activities -occurring faster than research and adoption of good practice e.g use of nitrogen fertiliser has tripled 1996-2007- Jim Sinner - ecologic

### Challenges...

- Water Quality & Quantity these are linked in terms of effects and ability to resolve issues
- Heavy reliance on one industry
  - below \$6.50 payout many farmers are uneconomic
  - High debt /equity ratio
  - Public perception of this industry??
- Community & Environmental Resilience social stability, education... Ageing & declining rural population (ability to pay?) & a disengaged youth
- Linked to this we are tired of the ag/energy debate... we are a small region on a global scale...
- Global Issues \$\$, Climate Change/ Energy Issues/ Oil Prices

### Big Picture of Catchment Health

- Land Use and Nutrient Loss (N & P) –non point source
- Sediment, coliforms/pathogens
- Point Source Discharges
- Loss of Biodiversity across landscape
- Recognition of cultural landscape
- Restoring Native Fisheries and Food Gathering Sites(riparian and wetland restoration)
- Soil Quality issues e.g. cadmium build up
- River Access Improvement
- Heavy Metal Contamination
- Water Use and Efficiencies
- Governance and Leadership
- Time Frames 80-100 years? Early results 10-20 years...
- Source: Waikato River Independent Scoping Study

# Water quality trends in the Waikato River between 1989 and 2008

<ul><li>Improving trend</li><li>Deteriorating trend</li><li>No change</li></ul>	Taupo	Ohaaki	Ohakuri	Whakamaru	Waipapa	Narrows	Horotiu	Huntly	Mercer	Tuakau
Temperature	$\stackrel{\textstyle \stackrel{\textstyle \sim}{\scriptscriptstyle \sim}}{\scriptscriptstyle \sim}$	_	_	_	_	_	_	_	_	_
Dissolved oxygen	$\check{\odot}$	$\odot$	_	_	$\otimes$	$\otimes$	_	_	$\otimes$	_
Biochemical oxygen demand	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	_
Dissolved colour	$\odot$	_	_	_	$\odot$	$\odot$	$\odot$	$\odot$	$\odot$	_
Turbidity	_	_	_	_	_	_	_	(3)	$\otimes$	_
Arsenic	(3)	$\odot$	_	_	_	_	_	$\odot$	$\odot$	$\odot$
Nitrate	$\odot$	$\odot$	_	$\odot$	$\odot$	(3)	$\odot$	$\otimes$	$\otimes$	_
Total phosphorus	_	_	$\otimes$	8	8	8	8	_	(3)	_
Chlorophyll a	_	_	8	_	_	$\odot$	_	_	_	_
Enterococci	_	$\odot$	_	$\otimes$	_	_	_	_	$\otimes$	_

Water quality trends in the Waikato River between 1989 and 2008 (based on methods in Environment Waikato Technical Report 2008/33).

<sup>\*</sup>Note: Biochemical oxygen demand data is for the period from 1990, and turbidity data is for the period from 1995.

### Mana Whakahaere

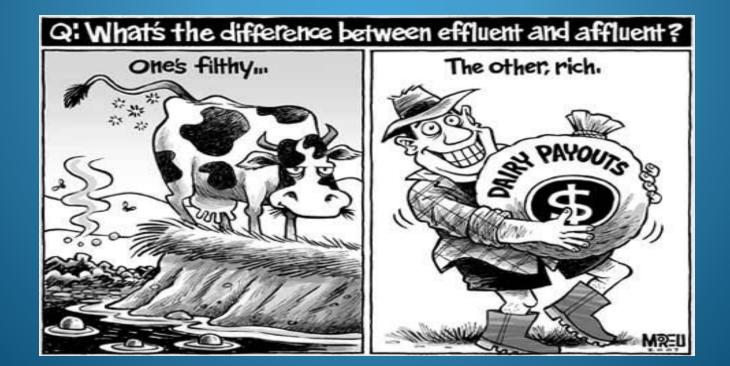
 "If we do nothing, then the N load leaching to the hydro lakes in 2030 will be 70% higher than that now (2006)".
 Bill Vant - EW







- Strategic Challenges..but
- Strategic Opportunities...



### Opportunities

- Co-Management architecture and acceptance of need for change... (don't underestimate!)
- Strong community partnerships
- Good presence (but reducing) plantation forests in upper catchment
- Some great work to date (TFT, Sustainable Milk Plans, ICM, Raukawa Farms)
- Smaller rural communities easier to network
- A long history of agriculture and ag support
- Presence of 3 Upper River Iwi working with our marae, hapu, lands trusts
   and incorporations

# What's required?

- Voluntary mechanisms alone will not get us over the line...
- A coherent combination of quality assurance systems (the 5 star tick), industry best practice plus a clear direction setting policy and regulatory regime.
- A clear set of expectations and pathways enabled through targets and limits with sufficient monitoring & enforcement
- We need to know what the limits will be, what timeframes to get there, how will we be measured and who will be monitoring?
- A longer term horizon for our policy and our actions...
- Need to recognise diverse values; including the inter-generational equity concept within Kaitiakitanga

## Challenges...

- Voluntary mechanisms alone will not get us over the line.. A shift is required
- This is <u>not</u> about business as usual
- This will require change......
- & this will require strong and effective leadership



