

# Freshwater - Fresh Thinking

Enhancing impact assessment in water management



**Thur 28 & Fri 29 Nov 2013** Caccia-Birch House, Palmerston North

This material is provided courtesy of the author following presentation at the New Zealand Association for Impact Assessment 2013 Annual Conference.

Reference or reproduction is by written consent from the author only.

Author: Dr Benita Wakefield  
Kaupapa Maori researcher, Lincoln University

[benita.wakefield@lincoln.ac.nz](mailto:benita.wakefield@lincoln.ac.nz)

# **Cultural Impact Assessment Case Study on the Ruataniwha Water Storage Scheme**



**Presentation By Dr Benita Wakefield,  
Marge Hape**

**NZAIA CONFERENCE November 2013**

# Map of the Tukituki Catchment





# Waipawa/Tukituki





# **Makaroro River Proposed Dam Site**

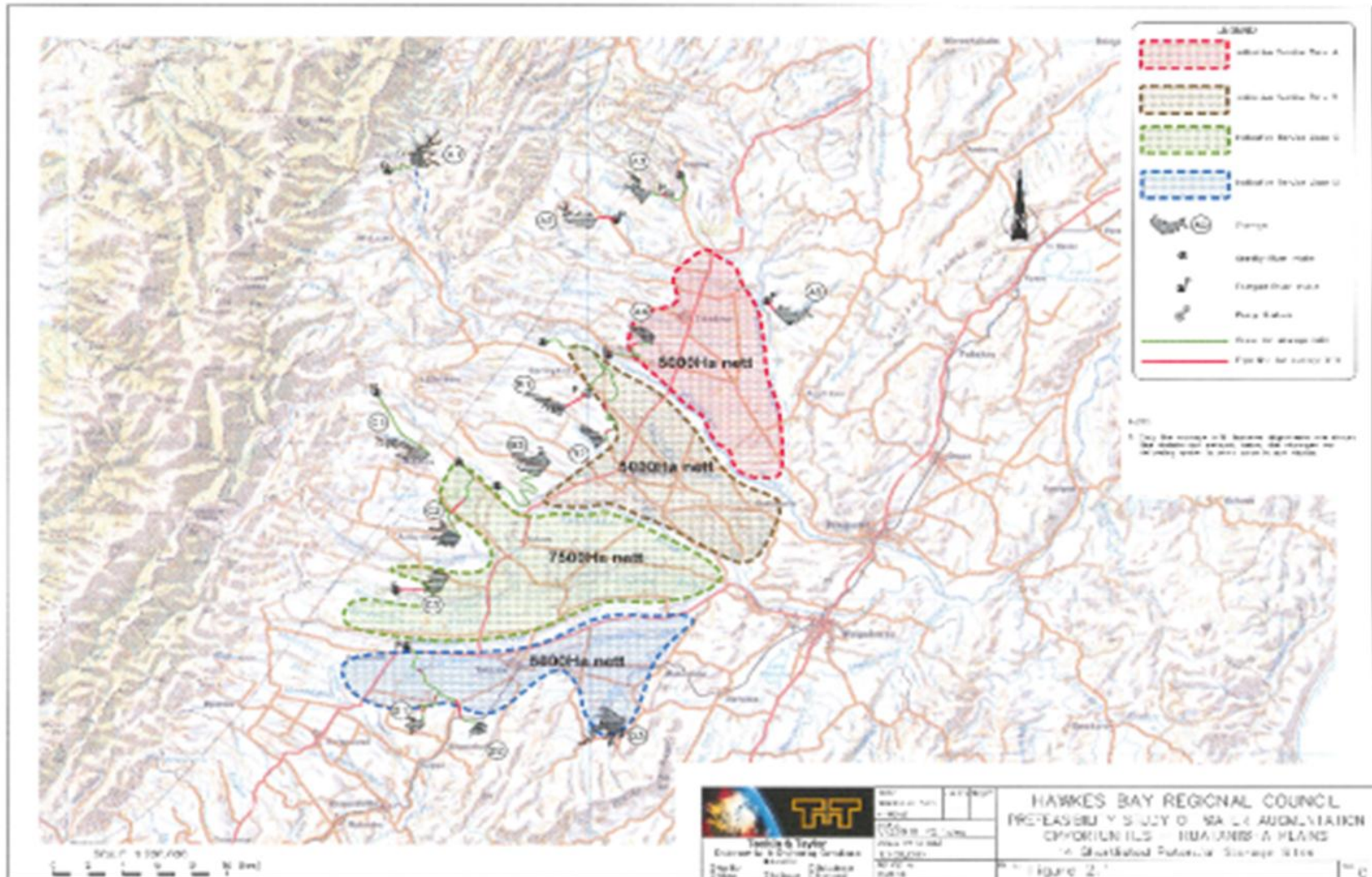


# Background

- Droughts and over-allocation of water
- Ground water abstraction affecting water quality, flows
- Demands for increased irrigation, land intensification and uses - dairy farming and crop farming
- Reliable water storage options investigated by the HBRC in their pre-feasibility study



# Pre Feasibility Study



# Cultural Impact Assessment

## ➤ Purpose

- Mana Whenua Perspective on identifying any areas of cultural significance, wahi tapu, wahi taonga
- Description of cultural values, traditional relationship with ancestral lands, rivers, sea, taonga species associated with Tukituki River
- Cumulative ecological health effects on the mauri – life giving force of the whole Tukituki catchment



# **Limitations of a CIA**

- Only provides a 'snap shot' of the current situation
- Reliant on information that is available at the current time (ie, geology reports)
- Must be viewed as part of a process in decision making that gives Tangata Whenua a voice to raise their concerns and to make recommendations
- As the proposed development evolves and changes, new CIAs need to be undertaken

<b>Marae</b>	<b>Hapū</b>
<b>Pukehou Marae</b>	Ngāti Pukututu Ngāi Te Rangitekahutia Ngāi Te Hurihangaiterangi Ngāi Te Whatuiāpiti
<b>Mataweka Marae</b>	Ngāi Te Whatuiāpiti Toroiwaho Rangitane Te Hauapu
<b>Tapairu Marae</b>	Ngāti Mārau
<b>Pourere Marae</b>	Ngāi Te Oatua
<b>Rongo o Tahu Marae</b>	Te Aitanga o Whata Rangitane Ngāi Tahu Ngāi Toroiwaho Ngāi Te Kikiri o Te Rangi
<b>Te Poho O Whatuiāpiti (Rakautatahi Marae)</b>	Ngāi Te Whatuiāpiti Ngāi Te Kikiri O Te Rangi Toroiwaho Rangikahutia Rangitotohu Ngāi Tahu Rangitane
<b>Rongomaraeroa Marae</b>	Ngāti Kere Ngāti Manuhiri Ngāti Pīhere
<b>Waipukurau Community Marae</b>	Nga Hau E Wha Ngāi Te Rangikoianake



# Careful Consideration

- Future Implications in post-Treaty Settlement era (ie, Heretaunga-Tamatea LNG represented by He Toa Takitini currently in negotiations)
- The role of the newly formed HBRC Co-planning committee
- Who holds the mandate ? – mana /tangata whenua marae and hapu or Ngati Kahungunu Iwi Inc.
- Marae and Hapu with Ahikaaroa along the Tukituki River from Ki Uta, ki Tai

# Methods

- Kaupapa Maori
- Haumanu Taiao Ihumanea analysis framework
- Consultation with Taiwhenua, marae and hapu
- Ethics approval to conduct Interviews with kaumatua, Pakeke, whanau
- Field trips and site visits
- One CIA and three supplementary reports prepared between 2010 - 2013

# **Tangata Whenua Values**

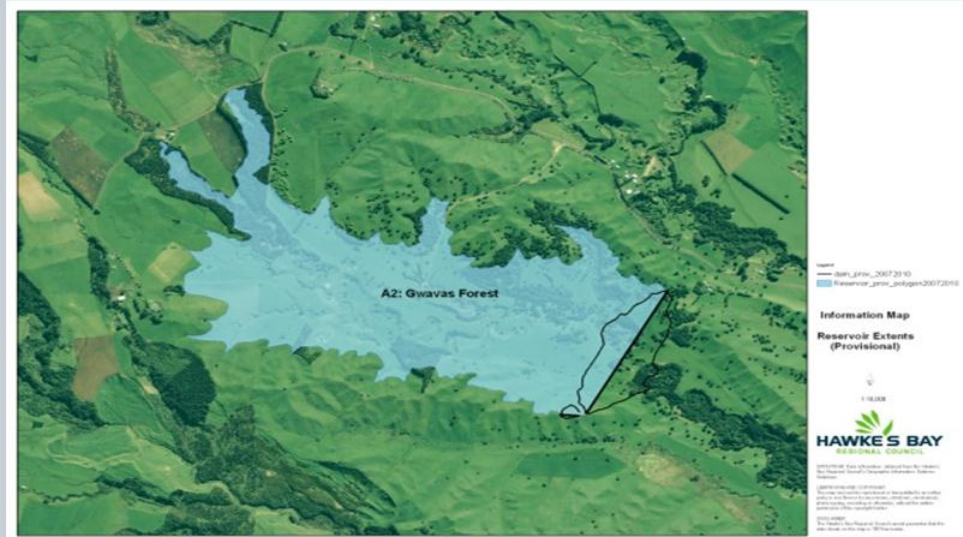
- Whole Tukituki catchment
- Te Ao Maori world view
- Kaitiakitanga
- Kaitiaki Atua – elements of nature
- Ki Uta Ki Tai
- Taonga Tuku Iho – ngahere, wai,
- Mahinga kai, biodiversity, ecosystems



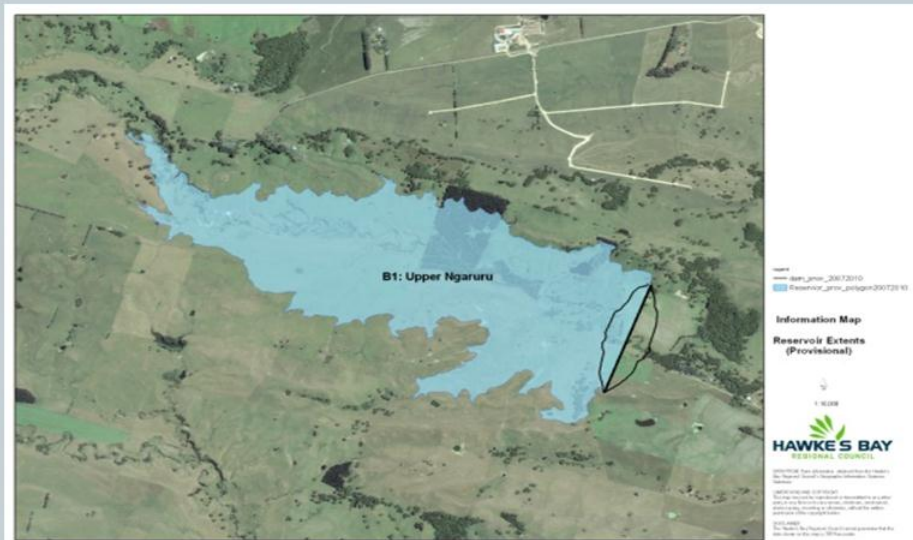
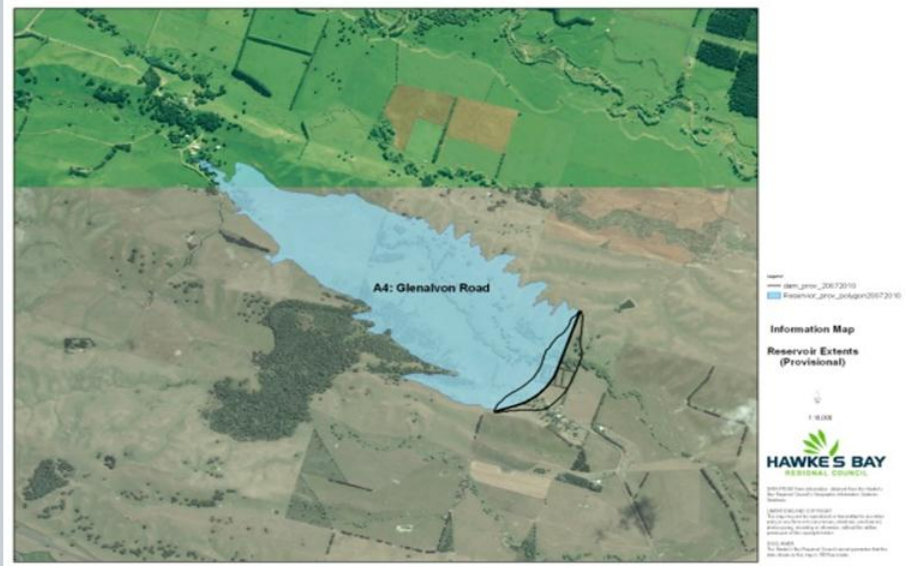
# **Values to flow regime and water quality**

- Head waters/ mauri
- Waipuna, aquifers
- Minimum water flows /flushes
- Mahinga kai, biodiversity
- Wahi tapu/ wahi taonga
- River mouth environment
- Kaitiakitanga

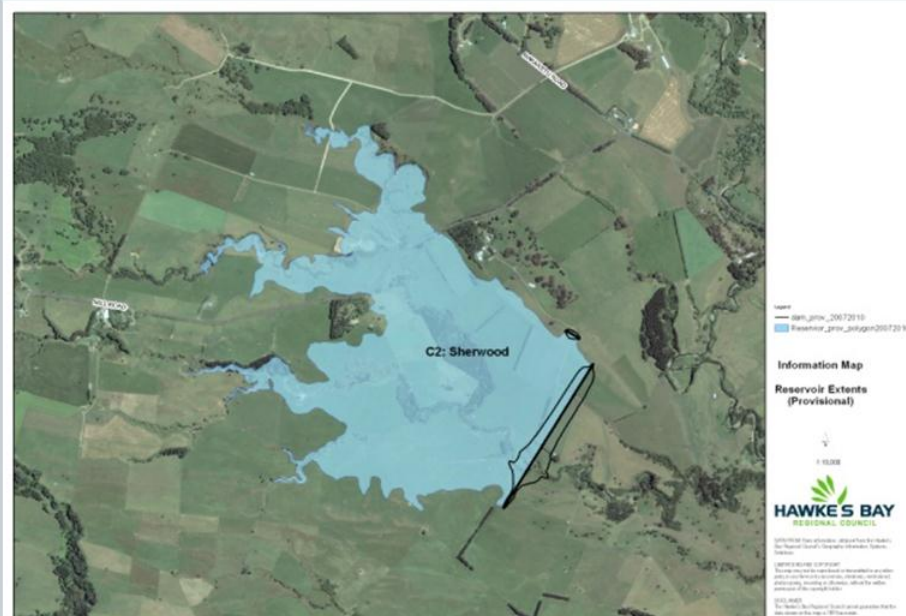
# 8 Sites (First CIA report)















# Wāhi Tapu Sites

Urupa	Pa	Physical Location	Site	Notes	Source
	unnamed Pa	Makaroro River	A1	Remnants of native forest	PC* (1998:7)
	Hakuru Pa	Gwavas Forest	A2	Unregistered wahi taonga/ wahi tapu sites in the general location Both sites are likely to be part of the Gwavas claim	PC and (1998:7)
	Kihiao Pa	Gwavas Forest	A2		PC and (1998:7)
					(2009, 2010) CHBDC M 4, and (1998: 7)
	Te Whiti o tu Pa	Glenalvon Road	A4	Located in the general area	CHBDC Map 4
237		Glenalvon Road	A4	Located in the general area	CHBDC Map 4
238		Makaroro Road	A4	Located in the general area	CHBDC Map 4
239		Makaroro Road	A4	Located in the general area	CHBDC Map 4
		Upper Ngaruru	B1	No known wahi tapu	
		Lower Ngaruru	B2	No known wahi tapu	
		Sherwood	C2	No known wahi tapu	
		Ashley Clinton Road	C3	No known wahi tapu	
	169		D3	Pa with pits and midden	CHBDC Map 12
	175		D3	Pa with pits and midden	CHBDC Map 12
246		Hinerangi Road	D3	Located in general area	CHBDC Map 12
				Unregistered Pa site and other wahi tapu in the area and also part of the Waipukurau claim	PC



## ➤ Wāhi Tapu registered/ unregistered

- Historically significant sites highly tapu
- Sites have been desecrated, destroyed completely
- Tangata whenua very suspicious and refused to register sites (in the Takapau area)
- No registered wāhi tapu in the 8 sites specifically but in the surrounding areas

# Tangata Whenua Responses

- Concerns for the overall health of the Tukituki

*“More water means more cows in the water polluting our taonga such as tuna, fresh water koura, fauna, flora etc”*

*“Our streams are drying up, affecting fishery habitats, spawning”*

*“Numbers of tuna have depleted compared with ten years ago”*

## ➤ Potential benefits or costs

*“...more employment, maybe water for the marae”*

*“Only the farmers will benefit...what’s in it for us Māori?”*

*“The council needs to be talking with us directly to work out what the benefits might be!”*

Overall, Tangata whenua were cautious and uncertain on what the potential benefits might involve for marae/ hapū



# Recommendations

- Marae/ hapū are consulted on changes in the feasibility study
- Consult with He Toa Takitini on claims
- Consult on any marae/ hapū plans being developed
- Have regard for the RMA sect 5,6,7,8
- Consider Tangata Whenua cultural values on the whole ecological health of the Tukituki

- Ensure the issues of over allocation, water flow and quality are at a sustainable level to restore health of taonga species
- Consult with Tangata Whenua to develop appropriate accidental discovery protocols for wāhi tapu/ wāhi taonga
- The HBRC will visit all the marae/ hapū directly to follow-up on the issues and concerns highlighted in the CIA report

# CIA (2011)

## Mākāretu Proposed Dam Site





# Mākaroro Proposed Dam Site







**Wall end covering this area**









# Cliff-face marking the wall







# Tail-end of the dam





# Tangata Whenua Responses

## ➤ Relationship with the rivers

*“Spent a lot of years eeling, big fat ones too...water pristine in parts, want my moko to enjoy the same”*

*“Used to be a clean flowing river...learnt how to swim...baby eels swimming up stream...go across the grass, slither up the rocks...glow worms”*

## ➤ Overall health State

*“You don’t drink the water like you used to”*

*“The oxidation ponds flow into a wetlands and then into the river – what are the HBRC doing about that?”*

*“...dried up streams for longer periods”*

*“...used to get silver bellied eels not anymore”*

There were particular concerns for:

- Effects of dairy farming
- Illegal water take
- Over allocation
- Dams affecting spawning, fishery habitat
- Loss of native bush



## ➤ Wāhi tapu sites

- One registered site was located on the southern cliff of the Mākāretu
- Kaumatua identified a number of very significant wāhi tapu sites (all unregistered) on the river
- No registered sites on the Mākaroro but known unregistered sites along the river.

## ➤ Potential Issues

*“That’s my main thing -do the right thing by the wāhi tapu”*

*“Could lead to farmers lobbying...demand a greater use for power and we as hapū are powerless to stop them”*

*“Is it necessary to alter the natural river flows?”*

*“need more information”*

*“Will the farmers be compensated?”*

## ➤ Potential Gains

*“In principle capturing water to store for future use is a good thing”*

*“If its part of a package that considers the health of the river then yes”*

*“Could be opportunities for employment but there needs to be some training offered as well”*

*“Needs to consider who owns the water ...a levy could be charged or a percentage back to the marae/ hapū”*



*“...Likely to be more recreational use...waka ama?”*

*“Fish stock will improve so who gets the license to fish?”*

*“Equality back to the marae – negotiate for a 10% payment”*

Overall, Tangata Whenua supported the proposed dam sites in principle although some marae preferred smaller dams built on the river to minimise the risks of the wall bursting and flooding down stream

# Recommendations

- Continue consulting directly with marae/ hapū on changes and developments
- HBRC consult with other marae/ hapū in the lowlands of the Tukituki to hear their concerns
- Consult with marae/ hapū on improving the health of the rivers
- Discuss opportunities with marae/ hapū to advance social, economic and cultural gains
- Dialogue directly with marae/ hapū on wāhi tapu sites

# Other Reports Prepared

- Ko Wai Ko Hua Cultural values and uses, CIA (2012), by Te Manaaki Taiao , Te Taiwhenua O Heretaunga for the RWSS
- Tukituki River Catchment: Cultural Values and Uses Report (2012), Te Taiwhenua O Tamatea and the Te Taiwhenua O Heretaunga for the HBRC
- CIA on the RWSS: Addendum report on Zone M – Old Waipawa River Bed and the Papanui stream (2013), by Te Taiwhenua O Tamatea



# **Follow up to the CIA reports**

- **Manawhenua Group** formed in November 2012 representing Heretaunga Taiwhenua, Tamatea Taiwhenua, Ngati Kahungunu Iwi Inc, nga marae o Heretaunga
- The purpose was to implement the recommendations from the CIA reports which involved: developing mitigation offset, protocols investigating the social and economic opportunities, review environmental effects and monitoring/mitigation

# Other Activities

- RWSS application submitted to the EPA in May, 2013
- MOU between Manawhenua group (except Ngati Kahungunu Iwi Inc. who withdrew) and the HBRC Investment Company in August, 2013
- Mauri Environmental Monitoring Project commissioned to Te Tapairu Marae on the Papanui stream in September, 2013
- The EPA hearings started in November, 2013