Kei te pūtake o te whaitua o te Whanganui-a-Tara tōna mauri mana motuhake... hei oranga mō te katoa.

The mauri of Whaitua te Whanganui-a-Tara and the communities who live within it is nurtured, strengthened and able to flourish.

Our kawa are an immutable injunction to provide for te wai mouri – the essence of life that is water, te wai ora – the water that nourishes life.

Our kaupapa is Te Mana o te Wai - to restore the dignity and esteem of water as a life giver and to have respect and regard for water bodies as living entities. We put the wellbeing of water and waterbodies first. Te Mana o te Wai will be achieved through the integrated management of water including its physical and spiritual properties which are fundamental to providing for its wellbeing and the wellbeing of all who rely upon it for existence

Our tikanga implement Te Mana o te Wai - Ki uta ki tai; He taonga te wai; Mana whakahaere; Mana tangata; Mana kaunihera

Whakapapa of Kaiwharawhara

Eg, Statutory acknowledgement from Settlement
The Kaiwharawhara stream has had a close association with Taranaki Whānui ki Te Upoko o Te Ika from its origins in Otari to its outlet to Wellington Harbour as one of the key source streams flowing to the harbour. Kaiwharawhara Pā, which was the early stronghold of Taringa Kuri (Te Kaeaea) and formed a gateway into Wellington Town, was located on the side of the Kaiwharawhara stream at its mouth. A trail wound through the forest from Thorndon, crossed the Kaiwharawhara Stream in Otari Reserve, headed up the spur and continued on to Makara. This section of the Kaiwharawhara Stream was then known as Te Mahanga. The track linked Taranaki Whānui ki Te Upoko o Te Ika settlements at Makara and Kaiwharawhara. Settlers recorded gardens situated near the stream and Taranaki Whānui ki Te Upoko o Te Ika caught kaka in a clearing by the stream. Otari can mean "the place of snares". This stream like the others around the harbour held a stock of tuna (eel) that fed as they grew to maturity prior to migrating to spawn. Piharau, inanga and kokopu came into the stream to spawn along with other freshwater species.

Desired outcomes

See first draft of environmental outcomes, which are being added to by TKT this week for 7 December workshop.

Current conditions (*Current state descriptions are being revised for consistency following feedback from Monday 30 November Whaitua Committee meeting)

	Ecological toxicity				Mahinga Kai			Sediment		Wāhi Tapu & Kōrero tuku iho			Nutrients for growth		Kaitiakitanga	Dissolved oxygen	Community connection
	Copper	Zinc	Nitrate	Ammonia	Taonga species	Access	Kai safe to harvest	Clarity	Deposited	Protection	Access	Mātauranga	Phosphorus	Periphyton			
Current state	C	B	B	B	C	D	D	A	A	D	D	D	D	C	C	A	
Recent trend													Strong negative				
BAU future state	D	C	B	B				A ↓	A				D	C		A	
Current state description	Contaminants in the stream are at levels which could be having toxic effects on the most sensitive species. These are particularly from short –term exposure to high contaminant levels.				Places where tangata whenua manage and collect food and resources and undertake activities to uphold tikanga Māori. Once supported a diverse and abundant mahinga kai that sustained many iwi over the centuries. In particular, the estuary where Ngāti Tama had a kainga/pā. But several sites throughout			Sediment is having minimal impact on instream biota. However, it's uncertain if the monitoring from the mainstem of the river is giving a good insight about the conditions of smaller tributaries in the catchment Other measurements of suspended sediment indicate a negative trend.		Wāhi tapu are protected both physically and through knowledge associated. Kōrero for place names is known and shared, including intergenerationally.			When the combination of factors are right, Periphyton growth reaches periodic short-duration nuisance blooms		The broader activity of being capable kaitiaki collectively as an iwi is important to the emotional and psychological well-being of the people, as it is central to our identity as mana whenua. Our birthright and inherited responsibility as kaitiaki to care for all that is living and existing within our rohe.	No stress caused by low dissolved oxygen on any aquatic organisms that are present at matched reference (near pristine) sites. This is based on spot samples rather than continuous. However, we have a high confidence in this assessment due to the steep and turbulent nature of these streams.	Needs development. Ideas around community engagement, stream care groups, visibility

	Intergenerational knowledge exchange	Natural character, stream form and function	Ecology		Mana whenua decision-making	Human health	
			Macro-invertebrates	Fish		*E. coli*	Primary contact
Current state	C		C	A		E	N/A
Recent trend						Strong negative	
BAU future state			C ↓	A		E	
Current state description	The passing on of knowledge is critical to the self-esteem of our people, to the succession of future kaitiakitanga of the River and ultimately to the leadership of the iwi as a whole. This intimacy of our relationships to the natural world means that we have inherited a cultural memory of how natural features like waterways should look, taste, smell, sound, feel and behave.	Needs development Ideas around room for the river, habitat diversity, channelization, form and function	Macroinvertebrate communities have a mix of tolerant and sensitive species that indicate moderate organic pollution or nutrient enrichment. There is high integrity of fish communities. However, it's uncertain if the monitoring from the mainstem of the river is giving a good insight about the conditions of smaller tributaries in the catchment.		For decision-making about the environment and human use and activities to be well-informed and have integrity, it's critical that decision-making is informed by māramatanga of the mana whenua and reflects full awareness. How involved are mana whenua in d-m?	The average risk of infections from swimming is greater than 7%, and is greater than 5% risk more than 30% of the time	

For 'BAU' future state - An arrow indicates a positive (↑) or negative (↓) change within an attribute state

Our whāinga	**Immediate actions (2020-2030)** Stop further degradation Take measurable actions that improve water within 5 years Lock in any expected improvements from actions in train Begin actions that contribute towards longer term water quality improvements	**Generational change (2030-2050)** Reverse past damage to bring our waterways and ecosystems to a healthier state Achieve the national bottom lines Achieve the types of improvements associated with the 'water sensitive' scenario	**Long-term outcomes (2050-2100)** Achieve the desired environmental outcomes.
Risks and barriers to our whāinga	*Insights from the expert panel assessments* The current approach to management may not maintain the current attributes state for zinc or copper. There may also be deteriorations within an attribute state for clarity, macroinvertebrates and *E. coli*. These are expected from additional contamination, earthworks and runoff associated with urban development, compounded by climate change leading to greater rainfall intensity mobilising contaminants and increasing streambank erosion and habitat disturbance in streams. Wastewater pipe maintenance may not be keeping up with degradation rates currently. Stopping further degradation will likely necessitate new development adopting water sensitive urban design practices to avoid these additional impacts by intercepting contaminants and slowing water runoff from these areas. Existing areas will likely also need to retrofit raintanks and replace zinc roofs in to help offset these new development areas and the rainfall and flow impacts of climate change. *Insights from small group discussions* Wastewater and stormwater • Risks – Climate change and population growth, poor uptake of new technology, lack of maintenance causing failures on new systems leading to lack of confidence • Institutional roles and responsibilities might contribute or be risks/barriers to best practice management • Barriers - Lack of institutional alignment and not enough funding, poor understanding of benefits of new systems and technologies	*Insights from the expert panel assessments* No attributes are below national bottom lines in this catchment. However, *E. coli* and phosphorus are in E and D state respectively, indicating they may be in a highly degraded state. The expert panel also assessed that attribute state improvement was likely for zinc as a result of further replacement of existing zinc roofs. Human wastewater contamination is likely the main source of faecal contamination in this EPAU, occurring during both dry and wet conditions. Removing dry weather leaks and network faults are likely to reduce the input of *E. coli* across all flows to lift the *E. coli* attribute state to 'C'. Wastewater contamination is also a contributor to phosphorus in the catchment. The removal of leaks and overflows will be beneficial for DRP, but not to an extent expected to change an attribute state. Further developments in mitigation technologies and/or land use changes may be required to lift this out of 'D' state. *Insights from small group discussions* Biggest risk is not doing anything in short term and leaving it to future generations	*Insights from the expert panel assessments* Further environmental improvements based on uptake of currently known 'mitigation' practices may be limited. Changes beyond the outcomes achieved in the 'water sensitive' scenario may require further developments in mitigation technologies and/or land use changes. The expert panel work showed the modelled mitigations will not achieve the A grade for *E. coli.* *Insights from small group discussions* Opportunity to reach community aspirations for removing contaminants from the environment by spreading costs over time with the opportunity for new technology.
Our journey – strategies, policies and actions to achieve our whāinga	Short term (0-10 years) improvements – high level description of methods (incl reg and non-reg) drawn from detail in issues summaries Opportunities – Growing community awareness of issues in the whaitua, three waters reform, introducing a regulatory pathway to the improvement communities want to see in water quality, restoring the mana of our waterways. Large developments and projects that have scale (both in terms of space and investment) to retrofit with new systems and infrastructure. Improving institutional roles and responsibilities Mana • Mana whakaharae, mana tangata, mana kaunihera • How is the mana of the people connected to the mana of the water? • Connection to place/stream though story actions such as storytelling, signs (naming awa) and the use of Te Reo • Awareness of issues • The unique identity and role of mana whenua as kaitiaki of water in their rohe is recognised and respected. Stormwater • Setting target states in PNRP • Set limits for all attributes associated with stormwater discharges in the PNRP. • Continue to implement the two stage global consenting process for network discharges to improve the quality of stormwater discharges from the stormwater network. Apply limits to Stage 2 global consents.	Mana • Mana whakahaere, mana tāngata, mana kaunihera • How is the mana of the people connected to the mana of the water? • Connection to place/stream • Awareness of issues Mahinga Kai • Additional measures to make enhancements? Wastewater • All grade 4 and 5 pipes are repaired or replaced • All historic cross connections are identified and fixed • Overflows are massively reduced (by the approximately 83% tested by the expert panel) Stormwater • Take opportunities for retrofitting stormwater quality systems, particularly in brownfields to reduce contaminant loads from stormwater discharges. • Continue reducing wastewater overflows into stormwater. Retrofit existing design • Roof replacements	Wastewater • All remaining overflows are fixed so overflows only occur in emergency situations Stormwater • Infrastructure – All remaining constructed and unconstructed wastewater overflows into the stormwater network are fixed and they only occur in emergencies. • Significant gains have been made to retrofit treatment into existing stormwater systems.

	• The Stormwater Strategies (developed by Wellington Water and approved by GWRC) required by Stage 1 global discharge consents are key to prioritising actions at catchment scales. • Policies to ensure contaminant load from new greenfield development is minimised, and is maintained or reduced from brownfields development. • Councils develop a long term vision for the three waters infrastructure that aligns investment for renewals and repairs with community and Whaitua objectives, following Te Mana o Te Wai. • More information is shared with the community about how their actions can impact on the aquatic ecosystems, especially around actions to reduce cross connections and the discharge of contaminants such as paint and other household contaminants. • The outcomes of the global stormwater stage 1 consent monitoring is shared with the community, so there is a better understanding of the impacts stormwater discharges impact on freshwater and coastal ecosystems. • Water sensitive design (WSD) becomes standard practice in all new developments, and there is ongoing investment into retrofitting our existing stormwater systems to reduce contaminant loads through WSD principles. • Raise awareness so people know that rain falling on their property, roads and public spaces transports contaminants to streams, rivers and coastal environments. • All agencies work together to support people to take ownership of issues in local streams. • Territorial authorities begin or continue to fund roving crews to ensure existing cross connections and other private drainage faults are identified and corrected. • TA building compliance officers undertake consistent and proactive compliance on new builds to ensure no new cross connections occur. • Take opportunities for retrofitting stormwater quality systems, particularly in brownfields to reduce contaminant loads from stormwater discharges • Regional and District councils, and Wellington Water, work together to align district plans, regional plans, infrastructure plans and Long Term Plans so that stormwater is managed to meet environmental outcomes. • Apply good planning practice as a tool for stormwater management. Ensure that spatial, structure, and master planning consider stormwater outcomes. • Regional and district councils, and Wellington Water, work together to overcome barriers to implementation of WSD. Mahinga Kai • Mana whenua monitoring to better understand baseline info and reconnect Wastewater • Incorporating target states and limits into the PNRP for attributes impacted by wastewater • Putting a review clause in upcoming wastewater network global consents to then bring them into line with target states and limits • More information sharing with the community on the impacts of wastewater on water quality • Real time water quality information signs at popular swimming sites • More partnership between community groups and organisations to understand and address wastewater issues • Water warriors help raise awareness and connect people with their local waterways	• Rainwater capture • Monitor the on-going performance of remediated structures to provide for fish passage Other • Compliance/enforcement/restorative justice • Monitoring of actions (not just water quality) – social connection and participation/actions, investments etc. • Monitoring – demonstrating environmental progress • Review and adaptation?	

- Funding (continued or new) for roving crews to identify cross connections and other private drainage faults
- TA building officers complete consistent and proactive compliance on new builds to stop new cross connections
- Wellington Water and TA's consider opportunities to reduce wastewater from the waste stream or using treated wastewater
- Warrant of fitness? [further feasibility to be thought through]
- Greater alignment between regional plans, district plans and infrastructure plans.
- Any priorities for infrastructure improvements in the short term?

Other

- Compliance/enforcement/restorative justice
- Monitoring of actions (not just water quality) – social connection and participation/actions, investments etc.
- Landfill contamination

Draft target attribute states

Summary table showing the current states and the sequence of changes through the three 'steps'. These could be categorical (eg, A, B, C) and/or narratives

	Ecological toxicity				Mahinga Kai			Sediment		Wāhi Tapu & Kōrero tuku iho			Nutrients for growth		Kaitiakitanga	Dissolved oxygen	Community connection
	Copper	Zinc	Nitrate	Ammonia	Taonga species	Access	Kai safe to harvest	Clarity	Deposited	Protection	Access	Mātauranga	Phosphorus	Periphyton			
Current state	C	B	B	B	C	D	D	A	A	D	D	D	D	C	C	A	C
Immediate actions	C	B	B	B				A	A				D	C		A	
Generational change	C	A	B	B				A	A				C	C		A	
Long-term outcomes	A	A	A	A				A	A				A	A		A	

	Intergenerational knowledge exchange	Natural character, stream form and function	Ecology		Mana whenua decision-making	Human health	
			Macro-invertebrates	Fish		*E. coli*	Primary contact
Current state	C		C	A		E	
Immediate actions			C	A		E	
Generational change			C	A		C	
Long-term outcomes			A	A		A	

*Succinct summary collection of ideas from TKT, Small groups and project team. This won't capture all of your ideas for a change. What other ideas would act on both immediate and systemic actions for changes?