

MEETING NOTES

SUBJECT	Whaitua Te Whanganui-a-Tara Coastal Workshop notes
WHEN	Thursday 10 September 2020, 12-2.30pm
WHERE	New Zealand Deerstalkers Association (3 Collina Terrace, Thorndon)
ATTENDEES	Louise (until 2.10pm), Quentin, Tui, Anya, Pat, Sam (from 1.10pm), Naomi (from 1.10pm)
PROJECT TEAM	Leigh Stevens, Megan Oliver, Megan Melidonis, Claire Conwell, Vanessa, Tim, Phill, Glen, Emily O., Denise, David, John, Mike Grace, Mark, Penny

Agenda

1. Tea, coffee and kai on arrival
2. Karakia and introductions
3. Ki uta ki tai – appreciating our whaitua from mountains to sea – linking catchment, estuarine and coastal values
4. Recap of current state from Salt Ecology report – key vulnerabilities and threats
5. Meaningful measures for coastal objectives – Mātauranga assessment framework, scope of Te Pae Kaitiaki, measurable science attributes, scope of coastal scenarios assessment
6. Objectives for outcomes – merits of freshwater objectives, discharge limits and coastal objectives
7. Coastal FMUs and reporting points for measures
8. Wrap-up and karakia

Actions

- The Coastal Expert Panel will include experts in attendance and they will look at what the scenario outcomes from the Freshwater Expert Panel mean for the coastal environment.
- Experts to follow up with proposal including potential spatial units and attributes to be assessed based on what can realistically be measured.
- Te Kāhui Taiao to identify specific places of value.
- Circulate link to [PNRP Schedule N: Stormwater management strategy](#) (starts on page 489).

Introductions

Vanessa opened the meeting with a karakia.

Committee members:

- Louise Askin – Committee co-chair, working on the hill country erosion programme at MPI, catchment coordination work at Makara Beach, mother of two young girls.
- Quentin – Community member living in the western hills near Belmont, co-chair of the Wellington Regional Biodiversity Group, primary parent, involved in volunteer work.
- Tui – Deputy Mayor at HCC, looks after work at the beach cleaning up rubbish and clearing the dunes of weeds.

- Anya – Community member living in Karori with three children, background in freshwater policy, has been working at the Ministry for Education for the last 5 years, focus on equity and addressing racism, stigma and bias.
- Pat – Community member from Upper Hutt, involved with Friends of the Hutt River and Pest Free Upper Hutt, organised a Zoom session with Nicole Miller from the Taputeranga Marine Reserve Trust.
- Naomi – Ngāti Toa representative.
- Sam – Taranaki Whānui representative.

Experts:

- Vanessa Tipoki – Works for Perception Planning as an Environmental Planner, member of the Ruamāhanga Whaitua Committee, sheep and beef farmer with an 8 year-old son.
- Megan Oliver – Senior Coastal Scientist at GW for 9 years, worked at NIWA previously, worked on coastal limit setting for the Te Awarua-o-Porirua Whaitua, on secondment for DoC working on the marine ecosystems team.
- Megan Melidonis – GW Coastal Scientist for the past year, previously working as marine/estuarine scientist in Cape Town, South Africa, working on water quality monitoring and project in the Wellington harbour, including an upcoming survey in November that happens every 4-5 years.
- Claire Conwell – Associate at Jacobs Environmental, previously worked at GW for 8 years focused on stormwater contaminants, involvement with Wellington Water’s global stormwater consent, understanding of urban impacts on freshwater quality and the coastal receiving environment.
- Leigh Stevens – Senior Scientist at Salt Ecology in Nelson, has done extensive marine work for regional councils including coastal monitoring for GW, involved in the Te Awarua-o-Porirua Whaitua process. The Salt Ecology report prepared in 2018 pulls together the story of key issues around the Wellington harbour.

Project team:

- Mark – Freshwater scientist at GW, welcomed to NZDA as host and provided history of building and hunting heritage.
- Mike Grace – Mana whenua Environmental Policy advisor at GW, a resource for sites of significance in the PNRP, including an emphasis on coastal areas for Ngāti Toa.
- Brent – Environmental Science team at GW, heavily involved in the Te Awarua-o-Porirua Whaitua process.
- David – Sustainability Advisor at HCC.
- Penny – Senior Advisor in Environmental Science at GW, background in science communications, Karori resident for 25 years.
- Denise – Policy Advisor on the Whaitua team, previously worked for DoC as a planner.
- John – Freshwater scientist contracted to the GW team, worked for MfE on the National Objectives Framework.

Ki uta ki tai – presentation by Vanessa Tipoki

Regulatory framework ([see slides](#)):

Vanessa has been working with Te Kāhui Taiao (TKT) to implement mana whenua values and act as kaitiaki in this whaitua.

- The NPS-FM outlines the fundamental importance of water through Te Mana o te Wai and a hierarchy that prioritises the needs of the water first, the needs of people second, and social/cultural needs third. TKT is working on a statement about what Te Mana o te Wai means in this whaitua.

- Ki uta ki tai (mountains to sea) is an integrated approach that recognises the interconnectedness of the whole environment, including the receiving environment.

Kawa applied to TWT ([see maps](#)):

Vanessa shared maps to demonstrate how the Committee's four kawa can be applied in Te Whanganui-a-Tara.

- Te kawa ora – Water is the source of spiritual and physical sustenance of all life. The Akatarawa forests and headwaters are pristine, used for baptism.
- Te kawa wai – The waters flow from mountains to sea. Map showing pa sites and values identified in the PNRP along Te Awakairangi, concentrated around estuarine areas, places of mauri and mahinga kai.
- Te kawa tiaki – We are the waterways and we are responsible for their care. The Parangaragu Lakes, co-managed by Taranaki Whānui and GW Parks has significant indigenous biodiversity.
- Te kawa honohono – Small and large streams are as important as the whole. Monitoring and restoration work at Kaiwharawhara through Sanctuary to Sea and Zealandia.

Committee comments:

- Are the pristine sites at the headwaters the traditional locations used by mana whenua or have mana whenua been pushed further out by colonisation and development? Values can be brought back or new values identified through regulation.
- The Parangarahu Lakes will be their own FMU, including the source at Collins Stream. The challenge is the mix of private and public ownership, which is what makes the collaborative governance model so important. The co-management relationship is going better now than in the past and it requires community engagement.
- Question to follow up with Te Kāhui Taiao: What are the coastal sites of significance where the Whaitua Committee can have the greatest impact for water quality?
- There's a correlation between the flow patterns of Te Awakairangi and sites of significance for mana whenua.
- Korokoro Stream will have a new cycleway and provide a better place to recreate.
- Bringing crustaceans back to the harbour would likely see a return in sting rays and healthy sea beds.
- Growing up on the Petone foreshore in the 1960s, people could pick up flounder beneath their feet. Some sting rays are still seen around the Petone wharf.
- Children are excited about life in the environment but it's rare to see sting rays and penguins. How can we bring life back to the coast?
- Sediment is coming down from the mountains and this is occurring at an increasing rate (like climate change). The system is unable to filter effectively as streams are piped and water moves more quickly rather than being trapped on its way down the catchment.
- People that don't live on the coast are disconnected from it. Need to help people understand that their stream feeds into a river that feeds into the coast, and that wetlands help filter contaminants in the stormwater network.
- Rubbish in waterways is the most visible pollutant to the public, especially after strong winds. It's not an attribute or limit, but it's an important part of what the Whaitua Committee can say to connect people to water quality.
- How can we connect the community to their local streams if they are inaccessible?

Salt Ecology recap of current state – report by Leigh Stevens

- The purpose of the report was to collate the existing information into a single document to make it accessible, catchment driven and show connections between the mountains and sea.
- Leigh's focus is on estuaries, which is where freshwater pressures are concentrated and exacerbated. They are highly valued food sources but have been devalued and buried by concrete and infrastructure.
- The report seeks to capture the types of information needed to make good decisions and to convey where there are data gaps. It looks at the symptoms and problems so we can then look toward solutions.
- In a broad sense, if we look after our streams and estuaries, we'll also be looking after the coast.
- Habitat loss has already happened to a large extent and it is not easy to reclaim but it's important to take opportunities where possible.
- Areas for the Whaitua Committee's consideration: sediment, nutrients, pathogens and contaminants.
- Sediment and nutrients are difficult to flush out in terms of their magnitude and longevity.
- Nutrient management is well understood but it is difficult to change practices.
- We are seeing an acceleration and increasing volume of sediment due to land clearance and intensive farming.

Q&A:

- In the Makara estuary, the sediment loads are higher than they naturally would be. Sometimes there is dredging at the river mouth – is this a man-made problem or solution?
 - Estuaries are slow to restore on their own. There is flushing through flooding events but the natural flush is reduced by land use changes. Stopping fine sediment from being transported in the first place would solve a lot of problems.
 - Some interventions will do more ecological damage than the current state. Dredging is part of the port maintenance in the harbour where there is a build-up of sediment.
- Is it possible for the Hutt River estuary to naturally reform?
 - The challenge is the degree of modification from the natural state, 80% of the Hutt estuary has been lost. It has become overloaded and does not have the capacity to regrow. Without major changes to flood management in the Hutt River, the estuary intertidal flats are likely to slowly infill.
 - The increase in sedimentation rates has largely matched sea level rise in recent times. We expect accelerating sea level rise to cause a change in coastal erosion, river systems and estuary margins. Climate change has intensified rain events and increased the delivery of sediments to the coast.
- If we set aside futurity, what improvement could we see in 50 years?
 - Degradation has happened over 100 years and it won't improve overnight but requires a long term framework.
 - Consider protecting low-lying land subject to future sea level rise but ideal for a salt marsh to develop.
 - Oriental Parade is a man-made beach but could it become more like a natural beach in the future?
- Would more wetlands along Te Awakairangi help reduce the sediment load?
 - A 5% increase in wetlands in the catchment would help, small change can make a big difference in reducing the volume and delivery speeds. On site stormwater

mitigations at a small scale can help the system from being overwhelmed by large flows but they are expensive to implement.

- Water can be slowed down by retiring land, reducing impervious surfaces.
- How do we work with anticipated changes to create a more natural environment?
 - If you create suitable conditions for sea grass or salt marsh to grow, it has a good chance of establishing (although it might not happen immediately). But if you continue to maintain good conditions, things will grow. This will help oxygenate the water and trap sediments.

Discussion and solutions:

- Focus on areas where there are diminished types of things, such as dune systems, and consider land use changes. Decisions will be made based on what is important to people, nothing is impossible but it might not be considered feasible.
- Golf courses could be converted to wetlands along Te Awakairangi. They are high water users in summer and contribute to the nutrient load.
- Te Awakairangi was developed for flood control. There are already replanting efforts and it may be possible to add more curves to the river, nature hates a straight line.
- Need to consider the consequences of opening up areas that have been flap gated to stop the tide from pushing in. Dredging helps keep the lower river open so that the estuary doesn't get backed up.
- The catchment modelling for the Porirua Whaitua showed where loads were coming from in different parts of the catchment and they may not always be in logical places. This can help steer effort in the right direction. BAU shows decline and won't improve the environment.
- The improved scenario tells us we need stormwater treatment without specifying what kind of treatment. Need to consider specific solutions and whether there is space for them on steep Wellington hills. Recommendations need to be practical and specific, acknowledging that there will likely be new solutions over the next 100 years.
- Land covered in native forest is not an issue but there are obvious changes that could be made where there are exotics or farming.
- In terms of pathogens, if you turn off the source they go away. There is a simple ecological outcome but the costs to fix the three waters network is astronomical. Need to think over long-term and take the first step. The level of investment required of the ratepayer is substantially less in Wellington than in Auckland.
- Water quality monitoring is focussed on pathogens, mostly at swimming sites. The open coasts have relatively good water quality because they are dynamic and well flushed.
- We know contaminants come from brake pads, road runoff and roofing materials, which are largely regulated through national policy. Changing brake pads in a district plan would have a major positive impact.
- Street sweeping before big rainfalls would remove a lot of problems with stormwater contaminants and is currently being done in other parts of the world.
- The Whaitua Committee could recommend a national policy shift and consider creative solutions such as urban catchment groups, raising awareness and education campaigns.
- Wellington Water has a global stormwater consent that covers the Wellington CBD, Hutt Valley and Porirua, inclusive of wastewater discharges into the stormwater network. The pipes don't have capacity for the volume which causes overflows into waterways. Direct wastewater discharges are not consented. Why do we allow discharges at all?
- The stormwater consent is renewed every 5 years. Circulate link to [PNRP Schedule N: Stormwater management strategy](#) (starts on page 489).
- We need a criteria to prioritise areas to invest money and effort, such as places that are particularly values or in aggressive decline. Need to consider science as well as mana whenua and community values. Need a guide to know where to start.

- Some problems are localised and not an issue, which means they could drop down the priority list. We want to target areas where we are making it worse and that match with our values.
- Highly contaminated areas may be due to historical activities, e.g., the Evans Bay gas works where they used to discharge directly into the receiving environment, but the quality is not due to current contaminant levels.
- This whitua is like a person that has been fed fast food and coke for 150 years and had their organs removed. There are ecosystems that persist and they are not beyond repair. We are on the cusp of being able to make things better again.

Closing comments

- It comes back to the long-term vision and requires connecting citizens to the task at hand to pay for it and muck in, beyond setting objective and limits.
- Education is key to change behaviour and it starts now.
- Instead of focussing on the catchment scale, consider individual actions and approaching it in a doable way. People want to be part of the solution rather than feeling overwhelmed. How do we enable people at the household level?
- If we want to fix the coast we have to start with how we treat freshwater further up the catchment. We need to start by taking the first step.
- Solutions possible in freshwater and land management.
- Stretch thinking beyond council cycles and budget for effective change.
- Need to frame recommendations in terms of short, medium and long term change. Identify who is responsible for doing what.
- Need to consider prioritising in terms of mana whenua values or tackling the worst areas first.
- The Coastal Expert Panel will include experts in attendance and they will look at what the scenario outcomes from the Freshwater Expert Panel mean for the coastal environment.
- Experts to follow up with proposal including potential spatial units and attributes to be assessed based on what can realistically be measured.
- Te Kāhui Taiao to identify specific places of value.

Vanessa closed the meeting with a karakia.