

Report of Te Awarua-o-Porirua Whaitua Committee Workshop

23 August 2018, 5.00pm – 9.00pm
Porirua City Council Chambers, Cobham Court, Porirua City
Workshop (Closed to the Public)

Summary

This report summarises notes from a workshop of the Te Awarua-o-Porirua Whaitua Committee held on Thursday 23 August 2018 at Porirua City Council Chambers.

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Overview

Workshop Attendees Te Awarua-o-Porirua Whaitua Committee:

Present: Diane Strugnell, David Lee, John Gibbs, Stu Farrant (Chair), Hikitia Ropata (arrived 6.00pm), Barbara Donaldson, Larissa Toelupe, Richard Cook (arrived 5.30pm)

Apologies: Warrick Lyon, John McKoy, Dale Williams

Greater Wellington Project Team: Tim Sharp (Project Manager), Sheryl Miller, Brent King, Shane Parata, Ned Norton, Suze Keith, Hayley Vujcich, Paula Hammond

Invited Guests: Megan Oliver (Greater Wellington), John Oldman (DHI)

Independent Facilitator: Kristy McGregor (Mitchell Daysh)

Notes prepared by Suze Keith and Kristy McGregor.

Workshop Purpose The purpose of this workshop was to:

- To debrief on recent engagement meetings and plan for future engagements.
- Committee to receive and discuss harbour modelling results and recommendations for objectives and confirm harbour objectives based on receipt of this information.

The first purpose of the meeting was achieved. The second purpose of the meeting was partially achieved, with the Committee confirming some objectives and a remaining few requiring further development from the Project Team before they will be adopted.

	TIME	TASK	PURPOSE	WHO
Proposed Agenda	Part 1: Introduction			
	5.00pm	Karakia		Hikitia
		Welcome <ul style="list-style-type: none"> • Apologies & introductions Chair's Direction <ul style="list-style-type: none"> • Purpose of meeting & agenda outline 	Establish purpose of meeting	Stu
		Housekeeping		Kristy
	5.10pm	Ngāti Toa Update	To update the Committee on where Ngāti Toa is at with development of their Plan	Hikitia
	5.25pm	Role of Tonight's Workshop Focus of the workshop	Clarify what we are doing tonight; where this fits in the decision-making process	Kristy
	Part 2: Stakeholder Engagement			
5.30pm	Debrief of Recent Community & Council Engagements <ul style="list-style-type: none"> • Porirua City Council – attended by John Gibbs, Diane Strugnell, David Lee • Porirua City District Plan Reference Group – John 	Taking feedback from the presentations and using this in future engagements; continuing to think about who is most important to	Diane, John and David (PCC and Rural Landowners) Tim (August 17 Meeting)	

	<p>Gibbs, Diane Strugnell</p> <ul style="list-style-type: none"> • Rural Landowners Engagement Meeting - John Gibbs, Diane Strugnell • August 17: Officers meeting with Upper Stebbings developers, WWL and WCC – Tim Sharp 	share this information with and what is going to be valuable to the committee's work	
	<p>Planning for Future Engagements</p> <ul style="list-style-type: none"> • Written update being prepared for Councillors – PCC, WCC and WW • September 19: Whaitua presentation to WCC Councillors • September 20: Committee presentation to Joint Harbour Committee • What other meetings should we be planning – who, when, what material is needed, and what would we be seeking to achieve? 	Confirm approach for next engagements – identify any others needed	Suze
Part 3: Harbour Modelling Results & Objective Setting			
6.00pm	Introduction	Set up harbour results conversation	Kristy
	<p>Why are we setting objectives for the harbour?</p> <ul style="list-style-type: none"> • Committee's role in the harbour space • Not an NPS requirement • Mandate through community expectations; Harbour Strategy • Elements that can't be managed by freshwater objectives 	Explain why the Committee is setting objectives for the harbour, even though it's not a national direction	Paula
	<p>Modelling Work Undertaken</p> <ul style="list-style-type: none"> • Extra information that has been gathered since visited in May 	Explain what extra information has been gathered	Brent & Sheryl

	Modelling work	in past two months	
6.20pm	Sediment	Recap on previous work; explain new information; discuss recommendations and reach consensus on objectives for each attribute	Brent, Sheryl, Megan & John
7.00pm	Dinner		
7.30pm	Pathogens <ul style="list-style-type: none"> • Introduce pathogens – what? Why? How does it relate to E.coli? • Measurements 		
8.00pm	Macroalgae <ul style="list-style-type: none"> • Relationship with nutrients • Measurements 		
8.10pm 8.20pm	Metals <ul style="list-style-type: none"> • Zinc • Copper 	Sign post the next steps for the objectives	Tim & Brent
	Next Steps for Objectives <ul style="list-style-type: none"> • How the objectives will be utilised going forward 		
Part 4: Conclusion			
8.30pm	Planning for WIP Development and Committee Workshops <ul style="list-style-type: none"> • Format for Committee WIP development and workshops 	Develop a plan for Committee Workshop timing to see through the policy development	Suze & Hayley
8.45pm	Other Business		Stu
8.55pm	Thank yous		Stu
	Karakia		Hikitia

This agenda was amended on the evening as Hikitia arrived at 6.00pm.

Key Decisions to be made Achieve consensus on the document titled *Summary of draft objectives in the streams and harbours of Te Awarua-o-Porirua: Wat are the types of changes the Committee is seeking and why?*

The following key decisions were to be made:

- Set objectives for the following attributes across the Onepoto and Pauatahanui Inlet (in some cases whole harbour): Sediment, Pathogens, Macroalgae and Metals.

Committee Decisions The Committee acknowledged high level agreement with the *Summary of draft objectives document*. Some small wording changes were recommended by the

Committee.

The Committee made decisions on objectives for the harbour. The following sets out the recommended objectives as proposed by the Project Team, and the objectives as agreed by the Committee:

Sediment

Pauatahanui Arm

Project Team recommendation:

The annual average sedimentation rate is less than 2mm per year [and no more than double the natural sedimentation rate] in the Pauatahanui Arm.

Committee agreed objective:

The annual average sedimentation rate is less than 2mm per year in the Pauatahanui Arm.

Onepoto Arm

Project Team recommendation:

The annual average sedimentation rate is less than [1mm or 2mm] per year [and no more than double the natural sedimentation rate] in the Onepoto Arm.

Committee agreed objective:

The annual average sedimentation rate is less than 1mm per year in the Onepoto Arm.

Mud Content

Project Team recommendation:

Sediment mud content does not exceed 20% in the intertidal sediments and should not increase from current state.

Spatial extent of soft mud shall not exceed 15% of the available intertidal area and no increase in soft mud area from current state.

Committee agreed objective:

As per Project Team recommendation.

Pathogens

Project Team recommendation:

Onepoto Arm intertidal – C band

Onepoto Arm subtidal – A band
Pauatahanui intertidal – B band
Pauatahanui subtidal – B band
Potential objectives for Open Coast – to be discussed?

Committee agreed objectives:

Not agreed. Project Team to do further work and report back to the Committee.

Macroalgae

Project Team recommendation:

EQR is not less than 0.6 (B band) and does not worsen from current state in intertidal areas

Committee agreed objectives:

As per Project Team recommendation.

Metals

Project Team recommendations:

Concentration of metals in sediment should be no more than 0.5 of ANZECC guideline values (ISQG) – low guidelines in intertidal areas, including reducing contamination in known intertidal hot spot areas

Concentration of metals in subtidal area sediments to reduce below ANZECC guidelines

Committee agreed objectives:

Not agreed. Project Team to do further work on wording of objectives and report back to the Committee.

Workshop Actions

The following actions were agreed to:

1. Barbara and Diane to provide feedback on the Summary of draft objectives document via email.
2. Jon to follow up with Jamie P on a further rural engagement opportunity with large land owners.
3. Jon to follow up with interested Residents Associations re future engagement with Barbara, Diane and Keith.
4. Paula to follow up with the Committee member regarding the business owner's query.
5. Jon to work with John McKoy to arrange for engagement with GOPI and Larissa with the Porirua Harbour Trust.
6. Brent to follow up with Jacobs to clarify whether construction activity is

- accounted for in the modelling.
7. Brent/Sheryl to work with technical experts including Megan to identify the most appropriate measure method for sedimentation rates (e.g. 5 year rolling average).
 8. The Project Team do further analysis of the recommended objectives for pathogens in light of the Committee's feedback, and report back. See specific areas to address listed in the body of the workshop notes.
 9. Project Team to improve the wording of the recommended metals objectives and report back to the Committee.
 10. When providing the Committee with material to consider that has already been discussed at a Committee meeting, note the meeting where it was discussed for the Committee's reference, or where possible link to the reference document.
 11. Suze to send out meeting place holder for the discussed and agreed workshop dates of Thursday, October 4, 5pm – 9pm and Saturday, October 27 & Sunday October 28, all day.
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Workshop Notes

Part 1: Introduction

Karakia & Welcome

The meeting opened at 5.20pm. Shane opened with a karakia. Stu welcomed the Committee. Stu provided an overview of the meeting, which was to look at the harbour modelling results. Stu noted that the first item on the agenda, the Ngāti Toa Update, in Hikitia's absence would be held until Hikitia arrived.

Role of the Workshop

Kristy explained that the purpose of the workshop was to look at the modelling results for the harbour attributes and to confirm harbour objectives. She explained that whilst some attributes had been workshopped in May, this was a revisit in light of the modelling results. She noted that the policy team had prepared some recommended objectives for the Committee's consideration, and that there would be time to discuss these in depth.

Kristy noted that prior to looking at the harbour modelling results, there was time allocated to a debrief of the recent community and Council engagements, and to think about possible future engagements.

Confirmation of Draft Objectives Document

Kristy sought confirmation from the Committee that there was consensus on the *Summary of draft objectives document* provided for the 12th July Committee Meeting. This was circulated prior to the

Committee meeting, and in the absence of noting consensus at the Committee Meeting, on a follow up email the Committee were asked for feedback; otherwise an absence of response assumed that they were content with the content. No correspondence was received from the Committee in relation to the document.

The Committee noted in the discussion that the urban contaminants and stream flows section should be amended to read 'to reduce'. Also, the stream flows section should be amended to read 'protect and/or improve'. The Committee clarified whether the document would change considerably following the confirmation of harbour objectives. It was noted that like all decisions, it is an iterative process and there will be refinements. Committee members noted suggested changes to the phrasing and tense of the objectives and were asked to respond via email following the meeting.

Action: Barbara and Diane to provide feedback on the Summary of draft objectives document via email.

Part 2 – Community and Council Engagement

Debrief of Recent Community and Council Engagements

The Committee Members attending each of the following engagements were asked to provide a report on the engagements.

Porirua City Council Councillors Workshop

The Porirua City Council (PCC) Councillor's meeting was attended, in addition to Project Team members, by Committee Members David Lee, John Gibbs and Diane Strugnell, who reported on the engagement. It was the second update to PCC and there was still some concern with lack of Councillor engagement. The Committee felt that some of the Councillors were struggling to understand what the Whaitua process was going to mean for them; some of the important parts, such as the economic analysis was over looked as other areas of the presentation were focused on by Councillors. It was noted that whilst there was some awareness of the Whaitua process and how it will connect with the District Plan Review, on the whole there was a lack of awareness about how the process is relevant to PCC. It was noted that the process has struggled because of its length.

The Committee reflected that the presentation needs to focus on selected clear key messages, not on specifics of objectives or technical information, for example, which can be too confusing. Also, to focus on messages specific to each group, such as for PCC, what it means for the harbour and infrastructure.

Porirua City Council District Plan Reference Group

The Reference Group presentation was attended by Diane Strugnell and John Gibbs, and Project Team members. It was felt to be a very positive meeting, with an open audience who could see the relevance of the process and asked lots of questions, as well as listening. The meeting was focused on the coastal and harbour objectives. It was questioned whether this group could be borrowed for future engagements?

Rural Landowners Engagement Meeting

The Rural Landowners meeting was attended by Diane Strugnell and John Gibbs. A Federated Farmers representative, William Beetham, attended the meeting. A good selection of major landowners were in attendance. Feedback was positive, including from one landowner who said it was the best meeting he'd been to. It was noted that given the line of questioning, it would have been useful to have more technical staff from GWRC to answer questions, as people were interested in the data that had been used to make decisions.

Residents seemed keen to better understand how the Whaitua process and Committees recommendations were going to impact on them, and wanted to hear more. It was noted that they were surprised by the approach of asking them if certain strategies weren't going to work, what would? A lot of informative interactions were had during the breakout session however no final wrap-up occurred due to the high engagement.

The Committee expressed a need to have a session with the larger landowners in the catchment, as larger properties provide more opportunities for mitigation options to be applied but could also bear more costs (depending on how policy packages are put together). The Committee acknowledged the Rural Landowner's expectation that there would be another meeting when the Committee have firmer recommendations.

Action: Jon to follow up with Jamie P on a further rural engagement opportunity with large land owners

It was noted that a number of Residents' Associations had expressed an interest in hearing from the Whaitua Committee.

Action: Jon to follow up with interested Residents Associations re future engagement with Barbara, Diane and Keith.

There was brief discussion over communication from a local business owner with a consented water take regarding implications of the Committee's draft policy direction on managing water takes at low flow and implications for their business, particularly in relation to the lack of current controls on their consent. These concerns were noted.

Action: Paula to follow up with the Committee member regarding the business owner's query.

Diane was congratulated for her ownership and confident presentation of the material, the way she had adapted it into her own language and made for very clear messages.

Officers Meeting with Upper Stebbings Developers

Tim spoke to the introductory meeting that was held to understand the Upper Stebbings development proposals, with GWRC, Wellington City Council (WCC) and Wellington Water (WWL) in attendance. GWRC explained the regulatory environment will be different for them as they develop the land, which is the last piece of greenfield development for WCC. WCC is developing a structure plan for the Upper Stebbings and surrounding rurally-zoned land which would provide the framework for how any future urban development would be carried out. WCC are seeking improvements on outcomes reached under WCC Northern Growth Framework structure Plan (includes the Lincolnshire development area). Committee members noted the importance of GWRC being involved in this conversation.

Planning for Future Engagements

The following engagements were identified as possible opportunities which Jon will facilitate:

To be led by John McKoy and Larissa respectively: Guardians of Pauatahanui Inlet (GOPI) and Porirua Harbour Trust

Action: Jon to work with John McKoy to arrange for engagement with GOPI and Larissa with the Porirua Harbour Trust.

To be led by Barbara, Diane and Keith: Combined Residents Association – Pukerua Bay, Plimmerton

Action: As per above, Jon to organise engagements with the Residents Associations.

Conversations are underway with the developer and planners for Plimmerton Farm.

Ngāti Toa Update

Hikitia provided an update on Ngāti Toa's work to date. The working group have met three times, and established the structure for their whitua report. They are planning to present to the rūnanga and engage with iwi members as well. This could possibly be done as whitua and rūnanga combined wānanga. A draft report is expected at the same time as the Whitua Implementation Plan (WIP), possibly earlier.

Ngāti Toa's report will be a narrative which looks at where they have come from, what they used to do and what the waterways used to look like. Hikitia noted it will then move into their expectations of what the future of our freshwater, harbour and land should look like. The expectations may have some targets or numbers attached with a timeframe, however they will look to the Whitua Committee's content to see if they need to do this. The purpose of the report is to be a working paper that can be used in other contexts, e.g. as an iwi management plan.

There was some discussion on how the two documents would describe their relationships to one another, and how much they could be interlinked. It was asked whether the WIP could include some of Ngāti Toa's narrative in its reflection of mana whenua values. The Committee identified an opportunity for Ngāti Toa to provide guiding principles, underneath which the WIP is then a technical document.

Two wānanga are being planned by Ngāti Toa with iwi, followed by a joint Ngāti Toa and Committee wānanga and field trip. The field trip is being planned for mid-September to discuss the marine cultural health indicators on the harbour and to possibly go for a waka ama sail.

Part 3 – Harbour Modelling Results and Objective Setting

Introduction

Kristy introduced the harbour modelling results conversation, noting that we were hoping to reach consensus on the recommendations as the Committee worked through each attribute.

Why are we setting objectives for the harbour?

Paula introduced the presentation by outlining the role of the Committee in the harbour space, and the policy direction for this area. She noted the alignment with the Porirua Harbour Strategy, as set out in the Terms of Reference for the Whaitua Committee.

Modelling Work Undertaken

Brent introduced John Oldman from DHI and the modelling work that had been undertaken.

Sediment

Brent spoke to the presentation on harbor modelling results [attached here](#).

The Committee received and discussed the sediment modelling results. The below summarises the questions raised.

- The Committee were surprised at the contribution of streambank erosion.
- Does construction activity come into the sediment modelling results? Brent to follow up with Stu at Jacobs to clarify. Brent noted that bare land construction is in the modelling. Transmission Gully is noted as current state in construction phase, and in the scenarios is considered operational.
- The more sediment that's there – does that mean the wind and wave suspension happens more? John O noted that as the water gets shallower, it does change the dynamics.
- What's the difference between current state and business as usual (BAU)? Current state is as it currently stands. BAU includes some of the expected urban development, Transmission Gully being operational and retirement of the Transmission Gully area. Water sensitive includes practice change as well.
- Why is there such a significant change in the Onepoto arm between current state and BAU? It was noted that will be the reduction in the upper Kenepuru with Transmission Gully's retirement, plus an increase in urban area.
- What is the natural sedimentation rate? Megan noted our ability to measure what would have been the natural rate is constantly improving. We think it would be less than 1mm per annum. This is the widely regarded rate.
- Does water sensitive design include retirement, stock exclusion and riparian planting? Brent noted it does, reducing streambank erosion, reducing peak flows – generally by retirement but it is not the only way to slow the water down – but the model is saying reduce streambank erosion as much as possible to get that shift.
- In the highly modified environment we're working with, are there any structures that can act as downstream mitigations? I.e. Divert rivers away from their normal landing place? Could sediment be stirred up and mobilized out of the harbour? Should we be looking at how to flush it out? Megan noted dredging as the only thing she knows of, and it is not widely used. John noted there are mechanical systems for stirring but managing them comes at a significant cost. Megan noted stirring up sediment may lead to other perverse outcomes.
- If we only address streambank erosion we'll never win though? Tim noted the co-benefits from streambank mitigations.
- Does sea level rise make any difference? John noted that need to look at the balance between the sedimentation rate and SLR – won't get much change.

- These figures are at the bottom of the catchment – at what point do they get to landscape scale? Brent noted this was the next piece of work, to prepare catchment scale loads and limits. The Project Team will work through this and a policy package recommending how this might happen.
- There's nothing on the subtidal objective for sedimentation/mud content? Megan noted it was part of the annual sedimentation rate for the entire arm.
- Why are we looking at improved and water sensitive in the freshwater area, and not a lot of difference, and then when it gets to the harbour it goes straight to water sensitive? Brent noted the team was time limited in their ability to test improved in the harbour.
- How does the natural sedimentation rate relate to forestry? Megan noted that the natural rate is on the basis of a fully forested catchment.

The Committee noted that one of the significant challenges was whilst a lot of work is done for small rainfall events, when there is an event of the 2004 scale, even engaging in industry best practice the sediment loads will be extreme. The most significant challenge faced is annual variability and climate, with one large event to exceed all other year's collective sediment loads. John Oldmannoted that the modelling takes into account that variability. Hayley noted that given the ordinary years and the large years, the Committee may decide on different policy approaches for different pressures (i.e. a policy approach to deal with the constant surficial run-off and an approach to deal with the landslide and stream bank erosion risk driven by large rain events) to build resilience into the system to deliver on both.

Megan noted that the figures are modelled estimates so there is a lot of uncertainty. It is known that we get more than 0.3 mm/yr now (Onepoto Arm only). If we can keep it at 0.3 it allows us to refine our estimates in the future using models and monitoring; and is optimistic.

There was some discussion on the reference to the term 'natural sedimentation rate'. The Committee were concerned there were not enough grounds to use the natural rate as a marker within the objective and that there was too much uncertainty around the natural rate currently for it to be a useful management tool for the WIP. Megan noted the use of the phrase was to provide for wriggle room in the policy space to refine the numbers as our ability to measure improves. More than double the natural sedimentation rate was when it was known that you are really impacting the ecology. The Committee expressed greater comfort removing reference to the natural sedimentation rate, recognising that furthering our knowledge of the natural rate and the review of the PNRP in ten years' time would allow be more appropriate than using this approach now.

There was brief discussion on the period of time over which a sedimentation rate objective should be measured in order to determine if it was achieved. There was recognition that a year-to-year measurement would not be appropriate because of the role of the intensity of rain events in driving sediment outcomes. Megan suggested that best practice may be a five-year rolling average – the Project Team should provide advice back to Committee on the most appropriate practice.

Action: Brent to follow up with Jacobs to clarify whether construction activity is accounted for in the modelling.

Action: Brent/Sheryl to work with technical experts including Megan to identify the most appropriate measure method for sedimentation rates (e.g. 5 year rolling average).

The following recommendations were made by the Project Team, with the objectives agreed/not agreed by the Committee as follows.

Sedimentation

Pauatahanui Arm

Project Team recommendation:

The annual average sedimentation rate is less than 2mm per year [and no more than double the natural sedimentation rate] in the Pauatahanui Arm.

Committee agreed objective:

The annual average sedimentation rate is less than 2mm per year in the Pauatahanui Arm.

Onepoto Arm

Project Team recommendation:

The annual average sedimentation rate is less than [1mm or 2mm] per year [and no more than double the natural sedimentation rate] in the Onepoto Arm.

Committee agreed objective:

The annual average sedimentation rate is less than 1mm per year in the Onepoto Arm.

Mud Content

There was little discussion on the mud content, with the following recommendation made and objective agreed.

Project Team recommendation:

Sediment mud content does not exceed 20% in the intertidal sediments and should not increase from current state.

Spatial extent of soft mud shall not exceed 15% of the available intertidal area and no increase in soft mud area from current state.

Committee agreed objective:

As per Project Team recommendation.

Pathogens

The Committee received and discussed the pathogen modelling results. The below summarises the questions raised.

- Does the change of tide have a greater effect than the flow of streams? John Oldman noted no more than the loads coming in.
- There was concern expressed that Browns Bay does not show up as a problem site, yet is known to be unpleasant. Brent noted that it may be worse than indicated in the modelling. Megan noted that there is no monitoring site at Browns Bay but GWRC does know it's a problem area, particularly because of tree roots, which impact on the infrastructure in the

vicinity. The Committee expressed a desire to see more achieved for a priority place such as this.

- Another site noted as problematic was Plimmerton Beach where the Taupo swamp drains in summer.
- What is the difference between sub and intertidal states due to flow?
- What were the interventions in the urban areas for wastewater, as modelled? Improved was modelled on 4 overflows per annum; water sensitive on 2 overflows per annum; and repair of laterals, cross connections etc. For stormwater, most were aimed at new urban areas. It captured a little of infill but by and large the existing area did not have much in the modelling.
- Why are the Project Team recommending to retain B bands when it appears in the modelling an A can be achieved in some cases? It was noted that modelling may be overstating what can practically be achieved.
- Is there any difference in human health in terms of where people are? Megan noted kaimoana is/used to be gathered in the intertidal area. The reason for discriminating is because the concentrations are greatest where those inflows are, and children generally like to play in front of drains.
- What is possible with the open coast? Brent noted that for Titahi Bay to Plimmerton, it could be treated as one area influenced by urban areas, and with a minimum B band. For the other more dynamic open coast, could shoot for an A. Megan also noted the need to consider the Wastewater Treatment Plant (WWTP) outflows. The Wellington Water collaborative group looking at wastewater options was discussed. Priority was previously on the upgrade of the WWTP, and is now considering how the network can provide for the improved outcomes of the harbour.

Megan noted the project team's recommendation to set objectives for a broader space than just specific sites. She noted spot sampling is not very meaningful; instead it is better to model the average band in the whole waterbody. The Committee expressed that some areas of the intertidal zone – such as around waka ama – are so significant for recreation, family life - and with the worst results, that they would like to set something specific for the site, and then everywhere else would be better. The Committee expressed interest in being more aspirational in the intertidal area, given that those are the areas that are most important to people – however questioned whether this was attainable? It was noted that PCC understands the high expectations of the community in relation to recreation in the harbour, as has recently been expressed through the consultation on the LTP. Further this has recognised with Wellington Water's approach to managing the network. This would lend support to a higher band in the intertidal area being considered.

The Committee questioned whether there were any other options to manage pathogens such as structures to divert flows away from highly used recreational areas. It was noted that engineering options in the harbour were both outside the Committee's ability to make recommendations on and that any such options would themselves have flow on effects.

Megan noted that some specific spots could be carved off with objectives set. Hayley noted that the modelling is showing it is easier for the subtidal area to achieve higher outcomes – perhaps a policy solution could be a two-step process to get to a different type of goal. The Committee acknowledged it was a long term goal (100 years perhaps?) but still need to aim for it.

The recommendations of the Project Team are set out below, along with the outcome of the Committee's objective setting.

Project Team recommendation:

Onepoto Arm intertidal – C band
Onepoto Arm subtidal – A band
Pauatahanui intertidal – B band
Pauatahanui subtidal – B band
Potential objectives for Open Coast – to be discussed?

Committee agreed objectives:

Not agreed. Project Team to do further work and report back to the Committee.

Action: The Project Team do further analysis of the recommended objectives for pathogens in light of the Committee's feedback, and report back. Specific issues to address are:

- *A sense check of the Pauatahanui sub-tidal recommendation of a B band when the WS scenario indicates an A is possible*
- *A sense check of the Onepoto intertidal recommendation of a C band when:*
 - *These locations are highly valued and used recreationally and culturally*
 - *Some parts of the Onepoto intertidal area are likely to get to an A or B under the scenarios while others will be hard to move from D*
- *Generally speaking, does the intertidal/subtidal delineation provide the most appropriate spatial delineation for objectives in the harbour for pathogens?*
- *Is there value in looking at a two-step objective at some locations where water quality is hard to shift by values and aspirations are high?*
- *Is the model underestimating pathogen contamination at Brown's Bay – current state shows red/yellow but the band is given as a B?*

Macroalgae

There was a short discussion on macroalgae. The Committee enquired as to whether setting objectives for macroalgae was compulsory. Brent noted that it was not compulsory but may be desirable, including as a means to manage the impacts of nutrients in the catchment. Nuisance macroalgae has also previously been noted by the Committee as being important to the community as detracting from recreational and amenity values in the harbour. A macroalgae objective would state a desired outcome and would be consistent with the other objectives that form the Committee's package.

The Committee questioned whether it was possible to strive for an A band for macroalgae. Megan noted that B band is the best that could be hoped for given the natural attributes of the Porirua Harbour and would be achievable. If the freshwater objectives are met this shouldn't be a problem and is a good check on nutrients.

The following recommendation was made by the Project Team, and objective agreed.

Project Team recommendation:

Ecological Quality Ratio (EQR) is not less than 0.6 (B band) and does not worsen from current state in intertidal areas

N/B: EQR is an index of macroalgal condition and can be used to provide early warning of excess nutrients.

Committee agreed objectives:

As per Project Team recommendation.

Metals

The Committee received and discussed the modelling results for metals. The below summarises the questions raised.

- Will the treatment of metals in the freshwater areas get us to the harbour objective? Megan noted generally metals aren't a problem except for hotspots next to outfalls. Monitoring sites within the harbour are well under ANZECC. Recommends breaking the space up to separate areas to set the objectives.
- Why are we using ANZECC not numbers? As we are only focussing on zinc and copper in WIP we are saying half ANZECC guidelines instead of using a e.g. 200 mg/kg zinc, to a) allow for policy to cover other metals if needed and b) in case number changes due to new research/technology.

Megan noted that the ability to influence metal concentration in the intertidal versus subtidal areas was different, with metals in muddy basins hard to shift. Whereas, intertidal can be diluted with clean sediment which is resuspended and/or flushed from the harbour – desire to protect those areas because they are currently in good shape. In the subtidal basin in Onepoto for example, zinc (ANZECC?) guidelines are exceeded and reducing concentrations will take dredging or massive amount of sediment to dilute it; which would be very difficult to shift.

There was discussion amongst the Committee about what could realistically be set for metals objectives, and whether reducing concentrations was possible, or only the loads going into the areas. It was noted that metals are caused by some things that the Whaitua cannot manage for, such as car brakes; that are a bigger conversation. Tim noted the group could urge the government to respond. Other sources such as building materials, road cleaning, pipe treatment can have policy recommendations formulated. The Committee noted that the legacy effect can't be addressed, and that the focus needs to be on reducing the inputs not contamination.

The following recommendations were made by the Project Team. The recommendations were not adopted with the Committee requesting further work, as set out below.

Project Team recommendations:

Concentration of metals in sediment should be no more than 0.5 of ANZECC guideline values (ISQG) – low guidelines in intertidal areas, including reducing contamination in known intertidal hot spot areas

Concentration of metals in subtidal area sediments to reduce below ANZECC guidelines

Committee agreed objectives:

Not agreed. Project Team to do further work on wording of objectives and report back to the Committee.

Action: Project Team to improve the wording of the recommended metals objectives in line with the Committee's feedback and report back to the Committee.

Next Steps for Objectives

Tim noted that with the objectives almost finalised, the Project Team will work to develop these into loads and limits, with suggested timeframes. These will differ depending on the attribute being addressed. The Committee noted the importance of having time to consider the loads and limits, as this will be where the 'rubber hits the road'.

Hayley asked in light of the work coming up, how the Committee wish to be informed and involved in developing the work – particularly, if there were specific areas of interest. The Committee identified both providing them with a timetable of working meetings that they could attend, and topic by topic pieces for the Committee to process – including recommendations that sit outside of the objectives – as two methods. Hayley noted that the Committee had provided the Project Team with a significant body of work and direction to develop into policy, which puts them in a good space.

An excerpt of the Ruamāhanga WIP recommendations were shared, to provide the Committee with the range of policy recommendations – some specific and some much more general.

Action: When providing the Committee with material to consider that has already been discussed at a Committee meeting, note the meeting where it was discussed for the Committee's reference or where possible link to the reference document.

Part 4: Conclusion

Planning for WIP Development and Committee Workshops

The next Committee workshops were set down for the evening of Thursday 4th October, and the 27th and 28th October for a weekend workshop.

Action: Suze to send out meeting place holder for the discussed and agreed workshop dates of Thursday, October 4, 5pm – 9pm and Saturday, October 27 & Sunday October 28, all day.

Thank you and Close

Stu thanked Hayley for her contributions to the Whaitua Committee over the last three and a half years.

Hikitia closed the meeting with a karakia.

The meeting closed at 9.10pm.

