



MINUTES

**Waiāri Kaitiaki Advisory Group
Meeting**

Wednesday, 10 August 2022

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**MINUTES OF TAURANGA CITY COUNCIL
WAIĀRI KAITIAKI ADVISORY GROUP MEETING
HELD AT THE HEI MARAE, 154 MANOEKA ROAD, TE PUKE
ON WEDNESDAY, 10 AUGUST 2022 AT 9.30AM**

PRESENT: Ms Darlene Dinsdale, Commissioner Shadrach Rolleston, Mayor Garry Webber, Deputy Mayor John Scrimgeour, Mr Jo'el Komene, Mr Maru Tapsell

IN ATTENDANCE: Mokoera Te Amo (alternate, Te Kapu o Waitaha)

Tauranga City Council (TCC): Nic Johansson (General Manager: Infrastructure), Carlo Ellis (Manager: Strategic Māori Engagement), Peter Bahrs (Team Leader: Water Services), Richard Conning (Senior Project Manager), Kelvin Hill (Manager: Water Infrastructure Outcomes), Rodney Clark (Tauranga City Council Water Treatment Manager), Sam Hema (Tangata Whenua Liaison), Keren Paekau (Team Leader: Takawaenga Māori), Jennifer Pearson (Community Engagement Advisor: Infrastructure Delivery), Robyn Garrett (Team Leader: Committee Support), Anahera Dinsdale (Committee Advisor)

Western Bay of Plenty District Council (WBOPDC): EJ Wentzel (Utilities Operations Manager), Chris Nepia (Strategic Kaupapa Māori Manager)

Bay of Plenty Regional Council (BOPRC): Ruby de Grut

EXTERNAL: Julie Proud and Eddie Bowman, NIWA; Keren Bennett, Technical Director (Freshwater Ecology), 4Sight Consulting; Dr Kēpa Morgan, Mahi Maioro Professionals

1 OPENING KARAKIA

Mr Mokoera Te Amo opened the meeting with a karakia.

2 APOLOGIES

COMMITTEE RESOLUTION WA3/22/1

Moved: Mr Jo'el Komene
Seconded: Mayor Garry Webber

That apologies for absence from Commissioner Bill Wasley and Manu Pene be received and accepted.

CARRIED

3 PUBLIC FORUM

Nil

4 ACCEPTANCE OF LATE ITEMS

Nil

5 CONFIDENTIAL BUSINESS TO BE TRANSFERRED INTO THE OPEN

Nil

6 CHANGE TO ORDER OF BUSINESS

Nil

7 CONFIRMATION OF MINUTES

7.1 Minutes of the Waiāri Kaitiaki Advisory Group meeting held on 18 May 2022

COMMITTEE RESOLUTION WA3/22/2

Moved: Deputy Mayor John Scrimgeour

Seconded: Ms Darlene Dinsdale

That the minutes of the Waiāri Kaitiaki Advisory Group meeting held on 18 May 2022 be confirmed as a true and correct record.

CARRIED

8 DECLARATION OF CONFLICTS OF INTEREST

Nil

9 DEPUTATIONS, PRESENTATIONS, PETITIONS

9.1 Presentation - NIWA - flow monitoring

External Julie Proud and Eddie Bowman, NIWA

Key points

- Key components of the flow monitoring programme were outlined – how flow was measured, gauging methods, rating curves, quality and assurance standards, and the Waiāri-specific situation.
- Explained how discharge Q was derived – cross-sectional area x mean velocity; explained how this was applied to the Waiāri.
- Outlined criteria and factors that determined site selection for flow monitoring and discharge calculation. Gauging sections changed over time as the river changed; what was a good section for monitoring may become less than ideal for flow measurement.
- Explained the equipment and method used for flow measurement and velocity. Could be monitored in real time. Pre and post measurement tests and checks were completed. Gauging data was processed as soon as possible while on site; if flows were significantly different than expected then reasons were sought, and more sampling carried out as needed.
- Outlined how stage-discharge rating curves were derived and how the data was used; developed by making direct and indirect discharge measurements. Explained the relationship between water level, channel geography and discharge; and how this could change. Noted that rating curves could be very dynamic.
- Noted that the Waiāri was a lot wider at some sites than it used to be. Both high and low flows could change the river geography which impacted on velocity and flow measurement.
- Noted the various standards that had to be followed and met for a monitoring programme such as on the Waiāri. Outlined quality assurance processes in place at NIWA.

In response to questions

- In terms of causes of a lowering in Waiāri flows, no other streams coming into the Waiāri were being measured, only measured the Waiāri flows at stages. A blockage in a subsidiary stream would create a lowering at the site measured which would be detected.
- Monitoring site location – there was a permanent slackline for monitoring across the river about 30-40m below the Waiāri intake. The Waiāri was problematic to access to wade across to make a physical gauging. Other sites further downstream had been washed out, side banks more susceptible to damage.
- There were problems with verifying rating curve shifts with supporting gauging data taken by physically wading the stream; limited stream access and Covid issues.
- Inaccurate data being provided had caused concern in terms of credibility of the monitoring information provided to the Waiāri Kaitiaki Advisory Group. The changing dynamic relationship between ratings and gauging data was emphasised, ratings could be backdated which changed the flow measurements.
- Water drone technology was being developed to be able to take gauging measurements across a river.
- Diagnostic tests were performed on all monitoring instruments used before deployment.
- NIWA was audited externally by Telarc every two years, and internally audited frequently to make sure that all standards were being followed and met.

Attachments

- 1 NIWA - How we undertake flow monitoring

10 BUSINESS**10.1 Project Report**

Staff Richard Conning, Senior Project Manager

External Keren Bennett, Technical Director (Freshwater Ecology), 4Sight Consulting provided a presentation.

Key points

- Biological monitoring was required as a resource consent condition and began in 2010. There were four established survey sites and there had been eight years of repeat baseline surveys. An extensive baseline data set was being established in advance of the water take commencing to enable analysis of the impact of the intake.
- Noted the diversity of habitats in the Waiāri; and the main habitats preferred by aquatic biota.
- Outlined the macroinvertebrate communities monitored in 2022. Lower stream environment was dominated by snails; upper stream dominated by biting midges.
- Noted variations between years and between upper and lower Waiāri. Variation was minimised by sampling at the same time of year and using the same methods.
- Generally, the health of the stream in terms of aquatic biota was good.
- Generally, the monitoring indices were the same upstream and downstream of the Waiāri intake.
- Currently there was less than the recommended ten years of data to enable trend analysis. Small trends were observed in some indices; however, unsure if significant.
- Fish communities – there was good diversity of native fish in the stream; longfin eel, inanga and redfin bully were the most frequently recorded species. Some variation in fish species between upper and lower Waiāri was expected.
- Water quality monitoring indicated generally cool clear water.
- Waiāri Project itself was progressing well and would be online and into production before the end of the year. Currently working through pre-commissioning tests of the intakes and pumps.

In response to questions

- Noted the differences in upstream and lower stream indices – increased impact of people and other activities as moved downstream.
- Generally, fish looked in good condition with a range of sizes evident. This monitoring was more about what aquatic biota was present/diversity rather than quantitative analysis of numbers of fish.
- Wider diversity of habitat upstream impacted on presence of various biota.
- Monitoring was carried out at the same time of year (February) when possible; tried to avoid any storm events.
- Migratory nature of fish meant that further upstream less numbers of fish were generally found.
- Basic water quality testing was carried out at all sites by measuring set physical parameters – oxygen level in the water (dissolved oxygen), water temperature, PH (acidity or alkalinity) of water, turbidity. Nitrates and nutrient levels were not measured. The factors measured provided a good indication of water quality.
- Queried whether there had been any engagement with the wider Māori community as well as the tangata whenua members of the Advisory Group; there had been no specific community engagement at this point apart from wider initiatives such as planting days. No one was specifically employed in the project to engage with Māori.

Discussion points raised

- Noted that the report was appropriate for the resource consent but that there was a need to consider the broader legislative framework of the National Policy Statement for Freshwater Management (NPS-FM) and include Te Mana o Te Wai requirements in the Waiāri context. Suggested that BOPRC be approached for a wider catchment view of the Waiāri to be developed – e.g. the Waikato River Authority. BOPRC had responsibility at regional catchment level and also had funding available. Suggested that a selection of Advisory Group members present to BOPRC around development of a Waiāri Te Mana o Te Wai statement.
- Difference between property rights and customary rights discussed; mana o te wai was about the mana of the water itself. Understanding of Te Mana o e Wai included cause and effect, health of the water – putting the water at the centre, considering wider impacts on the Waiāri.
- Te Tiriti was recognised through the Te Mana o te Wai framework but could be more explicitly referenced.
- Noted the perceived lack of engagement of WBOPDC in the cultural recognition initiatives being pursued by the Waiāri Kaitiaki Advisory Group. Noted that wananga had been scheduled to progress this work.
- Noted importance of the Waiāri to the regional Bay of Plenty economy; balancing of social and economic capital.

COMMITTEE RESOLUTION WA3/22/3

Moved: Mayor Garry Webber

Seconded: Mr Maru Tapsell

That the Waiāri Kaitiaki Advisory Group:

- (a) Receives the Waiāri Water Supply Scheme: Project Update report;
- (b) Writes to the Bay of Plenty Regional Council advising of our understanding of Te Mana o Te Wai in the National Policy Statement for Freshwater Management (which was given effect in 2020) in alignment with Te Tiriti o Waitangi;
- (c) Requests Bay of Plenty Regional Council through Te Hononga to fund the development of a Te Mana o Te Wai statement for the Waiāri and its wider catchment.

CARRIED

Attachments

- 1 Presentation - Waiāri Stream monitoring 2022

10.2 Mauri Model

Staff Richard Conning, Senior Project Manager

External Dr Kēpa Morgan, Mahi Maioro Professionals

Key points

- The model was a push of a button away from becoming live and was ready to be used as soon as approved by the Waiāri Kaitiaki Advisory Group.
- Was about understanding freshwater quality in Te Ao Māori – rangatiratanga and kaitiakitanga.
- Mauri was the life supporting capacity of a thing – the mauri-O-meter allowed accurate measurement of what mattered and facilitated a holistic understanding.
- Outlined the operation of the model; and the importance of understanding the impact of outliers.
- Score of zero was of no significance; +2 is absolute best normal; -2 indicated diminishing of the mauri.
- Demonstrated the mauri-O-meter website. The tewhatewha blade indicated the current state of the mauri of the Waiāri. Could be broken down into individual criteria such as flow monitoring. Included parameters such as the resource consent notification levels: -2 was the minimum flow of the river.
- Various indicators were included in the model e.g. E-coli levels, turbidity, dissolved reactive phosphorus, nitrates. Data could be portrayed on different time scales and levels e.g. monthly average, annual median, 95th percentile. More indicators could be included as needed.
- Overall indication on the mauri-O-meter was an average of the results of all the various indicators.
- Outlined possible use of QR codes as a way of accessing photographs over time.

In response to questions

- Could include maramataka phases for any of the indicators.

Discussion points raised

- A suite of indicators and thresholds had been developed in conjunction with iwi input; would be a live model in that indicators and thresholds could be changed over time as appropriate and feedback received.
- Tangata whenua involvement was included in monitoring various of the indicators involved in the model; this could be expanded and linked in with the cultural recognition work.
- Noted that Dr Morgan had been approached by Te Ohu Parawai o Te Waiāri regarding similar requirements for the Te Puke Wastewater Treatment Plant resource consent; there was the possibility of alignment of modelling and potential synergy with some of the model indicators. Could provide a more comprehensive longitudinal understanding of the Waiāri.

COMMITTEE RESOLUTION WA3/22/4

Moved: Mayor Garry Webber

Seconded: Ms Darlene Dinsdale

That the Waiāri Kaitiaki Advisory Group:

- (a) Receives the Mauri Model report;
- (b) Endorses the implementation of the mauri model.

CARRIED

Attachments

- 1 Presentation - Waiāri mauri model

11 DISCUSSION OF LATE ITEMS

- The appointment of Merekeeti Whare-Ririnui as alternate for Mokopuna o Tia me Hei was noted.
- For the commissioning of the Waiāri plant later in the year, TCC would engage with iwi to undertake site visits and a karakia/site blessing before the plant was made operative. A formal opening would also be arranged.
- Noted that this was Mayor Webber's last meeting as he was not standing for re-election at the upcoming local authority elections after serving one term as a community board member, two terms as a councillor and two terms as Mayor. Commissioner Rolleston acknowledged Mayor Webber's contribution and service to Western Bay, thanked him for his leadership and wished Mayor Webber all the best for the future.

12 CLOSING KARAKIA

Mr Mokoera Te Amo closed the meeting with a karakia.

The meeting closed at 12:40pm.

The minutes of this meeting were confirmed as a true and correct record at the Waiāri Kaitiaki Advisory Group meeting held on 16 November 2022.

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CHAIRPERSON