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Freshwater Policy Review- Round 1 Community and Stakeholder Engagement feedback report - Freshwater Policy Review 2022

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Executive summary

The National Policy Statement for Freshwater Management 2020 (NPSFM) requires all regional councils to review the freshwater aspects of their Regional Policy Statement and Regional Plan by 2024, and this has given rise to Council's Freshwater Policy Review project. In order to meet this timeframe, two rounds of community and stakeholder engagement have been scheduled for the Waikato Region, the first in the autumn of 2022 and the second a year later in autumn 2023.

This report provides the feedback gained from the first round of community and stakeholder engagement events, feedback received via email and the online survey. The online survey was designed to ask people for spatial information relating to freshwater management in their local area, or elsewhere in the region. The approach to stakeholders was to invite input with a region-wide spatial scope.

Community engagement – face to face and online

Process and participants

Nine face-to-face one-day community water workshops were held around the Waikato Region, with locations distributed across each of the indicative FMUs for Lake Taupō, West coast, Waikato-Waipā, Hauraki and Coromandel. An estimated 150 people attended the one-day water workshops representing members of the community, members of community groups and iwi/ hapū organisations, farmers and landowners, district and city council staff, district and regional councillors, stakeholders, agency staff, business owners, consent holders and rural professionals. Another 21 people completed an online feedback form with two more sending their written feedback via email.

The one-day community water workshops addressed Te Mana o te Wai, Freshwater Management Units (FMUs), long-term visions, values and environmental outcomes, and how to achieve them through non-statutory actions and regulatory methods. Information about the current state of freshwater was shared and communities invited to identify their own strengths and challenges around freshwater management and what they could make progress on locally. In reference to the steps of the National Objectives Framework (NOF), participants at the community workshops focused on:

1. Special sites and features, including contact recreation sites
2. Values and outcomes
3. Current state of freshwater and desired state
4. Actions and action plans (current or suggested for future)
5. Limits and rules

Key themes

Te Mana o te Wai

Community workshop participants noted that Te Mana o te Wai was paramount recognising that water was essential and should not be seen as a commodity but rather as an entity of itself. Community participants felt that people were generally disconnected from the water and needed to reconnect and reassess how we think about water, and not to take it for granted. An example provided was the changing perspectives on Whangamārino wetland – from seeing it as a swamp or drainage area, to appreciating its value as habitat for birdlife and as a filter to naturally cleanse water.

Te Mana o te Wai requires a holistic approach from the mountains to the sea. There is recognition that if we get the waterways healthy, all other things will flow from it. This means that the first thought should be for the water bodies we impact, and that people will need to accept constraints to protect the wai and change their behaviour for the wai. The hierarchy of

obligations and implementing Te Mana o te Wai generated a number of comments including finding a practical point of balance between degraded and pristine states and that aspirations need to be pursued with balance and tempered with an understanding of the cost to achieve them.

Participants made reference to Te Tiriti o Waitangi settlement documents that speak to the health of both water and people. It was noted that participants in the Waikato and Waipā catchments could see links between Te Mana o te Wai and the wording of the Objectives of Te Ture Whaimana, the Vision and Strategy. Waikato and Waipā participants saw links in terms of the restoration of the health and wellbeing of the water, placing a high value on the water, and the interrelatedness, with some supporting use of the current wording.

Long-term visions

Participants at each of the community one-day water workshops developed their own visions with some providing specific measures, methods (e.g. science, education, innovation, technology) and timeframes for achieving their vision. Some participants approached the visions process, constructing holistic and aspirational visions with others including more technical measures and parameters such as aquatic indicators and no further pests. Others noted the need for people to be part of the visions including reference to engagement, education and responses such as polluter pays. Others included their aspirations for freshwater to be affordable, sustainable and realistic as part of their visions.

Participants at the five Waikato and Waipā FMU workshops noted that Te Ture Whaimana o te Awa o Waikato – the Vision and Strategy for the Waikato River presented a local expanded version of Te Mana o Te Wai. Waikato and Waipā FMU participants acknowledged Te Ture Whaimana as long as there is flexibility on how we work toward achieving it. Participants at two workshops expressed their support to adopt the same objectives in Te Ture Whaimana o te Awa o Waikato.

Special sites and features

Community participants identified a range of locations where they undertake freshwater recreation and or activities, special freshwater sites and features in their catchment. The sites included, rivers, streams, lakes, aquifers, estuaries, river mouth, waterfalls bush and scenic reserves. Some of the reasons these sites and features are considered special included nature, boating, relaxation, serene, it's home and a beautiful river mouth.

Participants provided a range reasons and comments for why they may no longer use freshwater sites and places due to water quality including responses ranging from those that felt water quality is good, to those who noted algal blooms, koi carp, "grotty water" or "dirty water", septic tank or wastewater discharges and general concern about water quality. Some of the responses on why the sites are not suitable for recreation included neglect and overcrowding of invasive weeds, a lack of management and general poor quality and not suitable for fishing due to a lack of fish.

In relation to where sites were not suitable for swimming due to dead fish, weeds, and sediment build up in locations, general poor water quality, E. coli levels, cyonobacteria and negative experiences from toxic water when swimming in waterways.

Values and outcomes

Community participants generally assigned importance to all four national compulsory values (ecological health, human contact, threatened species and mahinga kai) (Appendix 1A of the NPSFM). Participants also identified other values (i.e. other values that councils must consider - Appendix 1B of the NPSFM). Participants in all the FMUs identified aspects of natural form and character. For the region as a whole all the other values that must be considered were identified. Participants also identified amenity and recreation values for activities such as biking and

walking, activities that do not take place in water, and an additional value, not part of the NPSFM compulsory and other values, being human contact – geothermal was identified. Participants described what aspects of these values were important to them and identified locations in their catchment where these values applied.

Attributes and targets

The general concerns of community participants about the current state of their waterways included levels of sediment, general decline in water quality, the impact of plant, animal and fish pests (invasive species), nutrient effects on human health and ecosystems, cyanobacteria, associated toxins and algal blooms and effects, and nitrogen and E. coli levels. Other concerns included sewage spills, industrial and municipal discharges into local rivers, negative impacts of land use (farming, forestry, urban settlement, industry, stormwater management, wastewater management), and overuse of the water resource.

The freshwater state community participants would like to achieve included reducing sediment, reducing E. coli and cyanobateria levels, aiming for a swimmable state within a reasonable timeframe, aiming for a healthy sustainable ecosystem (eradicating plant, animal and fish pests), drinkable water, restoration of native plants that originally belonged to the area and restored presence of native species. Some community participants regarded water quality perfect as is and the maintenance of current water quality. When asked what water quality state should be aimed for on a scale between 'current state', 'improve a little' and 'improve a lot', most participants who responded chose towards 'improve a lot' on the scale.

Community participants were asked what they were happy about regarding the current state of their waterways and freshwater management, that they wanted to retain. Participants were generally happy with the fencing and planting that had been achieved, stock exclusion, waterway access and access to fishing, the healthy fish populations, increasing eel numbers, and catchment group support. Participants also mentioned they were happy with the nitrogen controls and the current work in Taupō to improve water quality. Some community participants provided names of waterways in their area they were generally happy with regarding their freshwater state e.g. water clarity and water quality in the upper catchment including Taupō, Awaroa river, and clean state of Waiwhakaurunga (aka Kauaeranga).

Current actions and action plans

Community participants identified a number of key actions already in place to improve freshwater, these included the changes to farming systems such as less stock and lower input systems, fencing and planting, education and involvement in catchment, protection or care groups, involvement in farm planning and greenhouse gas workshops, catchment plans and nutrient budgets, wetland restoration, retiring areas of land, animal and plant pest management and wastewater upgrades. In Taupō, community participants mentioned the current farming restrictions, intensification restrictions, stock exclusion from waterways, and nitrogen limits/ nitrogen allocation using Overseer.

A range of other actions were suggested by community participants to improve freshwater including education with schools and with communities regarding freshwater issues as well as wetland protection and restoration, pest management of invasive plant and animal species, access to funding, providing incentives to address issues, resourcing and funding such as funding local groups to create nurseries and accessing eco-sourced plants and providing an educative supported approach rather than regulation. Other actions to improve freshwater included working together to create connectivity and stronger support for rural communities, better and wider engagement with rural and urban communities, and closer collaboration between regional and territorial authorities.

Limits and rules

There was a range of views on who and what activities need to be regulated to manage freshwater in the region. These ranged from those community participants who consider that there is too much restriction to those who focused on particular activities and made suggestions about the following activity types and management tools: farm plans, land use change, discharges to water, fertiliser use, stock exclusion, riparian management, the take and use of water, intensive winter grazing, farm dumps, earthworks, vegetation clearance, land disturbance, structures in waterways, pest management and wetlands.

Some community participants mentioned additional rules including buffer rules based on land use and slope with maximum slope restrictions, reduced fertiliser use, upper bounds on acceptable nitrogen loss (which will differ on catchment and FMU), no sewage discharge to waterways (treated or not), fencing of all waterways, and silt traps on point source discharges via drains.

Community participants mentioned tailoring management and practices to each individual farm and to take into account the unique characteristics of each different area for management rather than a blanket approach. Some community participants thought that the rules were not effective and that greater education is required while other participants called for clarity with definitions, realistic targets and sensible, practical, and achievable rules.

Challenges, strengths and how to progress

Community participants mentioned a range of challenges and strengths for achieving their shared visions. The challenges included the range of different perspectives and bringing these perspectives together to bring about change, the financial and time constraints in addressing issues, and responding to conflicting legislation.

The strengths included resilience of the community, having a strong connected community, recognition that there needs to be change, recognition of many groups already working together, catchment groups and sector leadership and growing awareness about what has started through Te Ture Whaimana - the Vision and Strategy.

Suggestions on what we could progress with now included changing attitudes through raising awareness and education of the issues and potential mitigations, community engagement, more collaboration and community connecting with other groups, iwi and agencies, and continuing with the good work already happening.

Stakeholder engagement – face to face and online

Process and participants

Altogether an estimated 240 people participated in conversations with staff at the range of stakeholder sessions held either online via Microsoft Teams or in person. There were also 15 stakeholder responses to the online feedback form and three stakeholder responses via email provided as written feedback.

Stakeholder engagement in Round 1 occurred mainly via existing forums and groups. For some existing forums/groups a presentation on the Freshwater Policy Review was added as an agenda item to existing meetings followed by a questions and answers session. The groups/forums this applied to included: the Advisory Committee for the Regional Environment (ACRE), Combined Waikato Region Forum, Drystock Sector Group, Forestry Industry Liaison Forum, Future Proof, the Waikato Mayoral Forum and the Waikato Chief Executives Forum for territorial authorities. For other groups/forums a facilitated session was held after the presentation on the Freshwater Policy Review. The groups/forums this applied to included: the Arable Sector Group, Dairy Sector Group, Territorial Authorities and the Water Users' Liaison Forum. In addition, an open

combined sector introductory facilitated session was offered online. For the facilitated sessions, the online feedback form and feedback via email, participants answered questions regarding freshwater management including feedback on their priorities, the challenges facing their sector, work they are doing to halt degradation and improve freshwater, what else should be done, and ideas on how WRC should halt degradation and improve water quality through WRC planning documents. Online feedback and feedback via email was received from the pork, fruit and vegetables, kiwifruit, energy, territorial authorities, recreational group, dry stock, rural advocacy and dairy sectors.

An evening webinar was also held. Participants were presented with project information, had an opportunity to answer questions and were then orientated to the online tools to provide feedback.

Key themes

Priorities

The priorities for stakeholder respondents regarding freshwater varied however the overall common themes included access to freshwater for use, allocation of freshwater, better and efficient water management, reliability of water supply, balancing priorities in respect of ecological, environmental and social, sustainable use of water, water conservation, having reliable scientific data, minimise water pollution, and minimise water contamination.

Challenges

The most common theme shared by stakeholder respondents regarding the challenges facing their sector was the complexity of various regulations and policies to contend with and reforms to the New Zealand resource management system (RM reform). There were comments about competing policy directions (e.g. National Policy Statement for Urban Development (NPSUD) versus NPSFM and National Policy Statement for Indigenous Biodiversity (NPSIB)), having to keep up with national and regional water reform, the costs involved, and planning investment in mitigations and action plans when there is uncertainty in regulations. There was comment about how changes to legislation can require significant funding to meet standards and the pressure this puts on communities. Other challenges included urban growth and the increasing pressure on water sources, managing climate change impacts and effects, resource challenges, timeframe constraints, water takes and reliable access to sufficient water. Current allocation was another challenge mentioned and how this needed to change to a more merit-based system i.e. moving away from the 'first in first served approach' to allocation, that it was not based on merit and that regulation needed to enable a more efficient and equitable system.

Actions

Stakeholders are involved in a number of actions to halt degradation and improve freshwater. Actions commonly mentioned by stakeholder respondents included utilising research and technology and best practice principles and practically applying these, industry based best practice programmes, certified compliance programmes, training and education programmes, infrastructure upgrades, integrated catchment management planning, sustainable water management, water conservation, and mapping and monitoring water quality.

What else should be done

When asked what else should be done, stakeholder responses varied although a common theme was for better regional and stakeholder collaboration for managing freshwater, including working with industries/sectors. Other suggestions for what else should be done included improved public awareness and education campaigns possibly through a coordinated freshwater education program rolled out by central government, improving science basis e.g. understanding of ecosystem health through eDNA testing, recognising the potential of catchment groups as a driver for on-farm change, and recognition of industry processes.

Solutions

Key suggestions from the stakeholder engagement were made as to how WRC should manage freshwater in its planning documents to give effect to the NPSFM including simplifying the rules so they were clear and easy to follow, utilising existing regulations and prioritising co-benefits, adopting a catchment specific approach that focuses on priority catchments, working with industry regarding opportunities for improvement, acknowledging and or providing incentives for those who are making real efforts to improve their management of freshwater, providing the right mix of 'carrot' vs 'stick' regulation, water security and reliability, links to climate change mitigation, avoid duplication of other relevant legislation, and to keep in mind costs and burden on ratepayers of what may be required by new rules/requirements.

1 Introduction

The National Policy Statement for Freshwater Management 2020 (NPSFM) was released as part of the Essential Freshwater package to halt the degradation of freshwater and then to bring about improvements. The NPSFM sets out expectations that tangata whenua and the community will be engaged on many aspects of freshwater management. These include the application of the concept Te Mana o te Wai to local freshwater, setting long-term visions, and working through every step of the National Objectives Framework (NOF).

In addition to formulating long-term visions consistent with Te Mana o te Wai under the NPSFM, the key NOF steps are to:

a. Identify Freshwater Management Units (FMUs) in the region
b. Identify values for each FMU (including Māori values)
c. Set environmental outcomes for each value and include them as objectives in regional plans
d. Set attributes for each value and set baselines for those attributes
e. Identify attribute states, environmental flows and levels and other criteria to support the achievement of environmental outcomes
f. Set limits as rules and prepare action plans (as appropriate) to achieve the environmental outcomes.

The NPSFM 2020 requires all regional councils to review the freshwater aspects of their Regional Policy Statement and Regional Plan by 31 December 2024, and this has given rise to the Council's Freshwater Policy Review project. In order to meet this timeframe, two rounds of community and stakeholder engagement have been scheduled for the Waikato Region, the first in the autumn of 2022 and the second a year later in autumn 2023. Targeted engagement is planned to take place between these two Rounds. These two rounds include the opportunity for some sector/stakeholder discussion and input via online channels.

Concurrent engagement with tangata whenua is ongoing throughout the Freshwater Policy Review and is not included in the scope of this report.

This report presents the results of the key elements of Round 1 of community and stakeholder engagement. These included community events (nine one-day water workshops held around the region) and an evening webinar, an additional local event held in Matamata in response to stakeholder interest, online tools (surveys and interactive map – both stakeholder and community input), and stakeholder presentations and workshops.

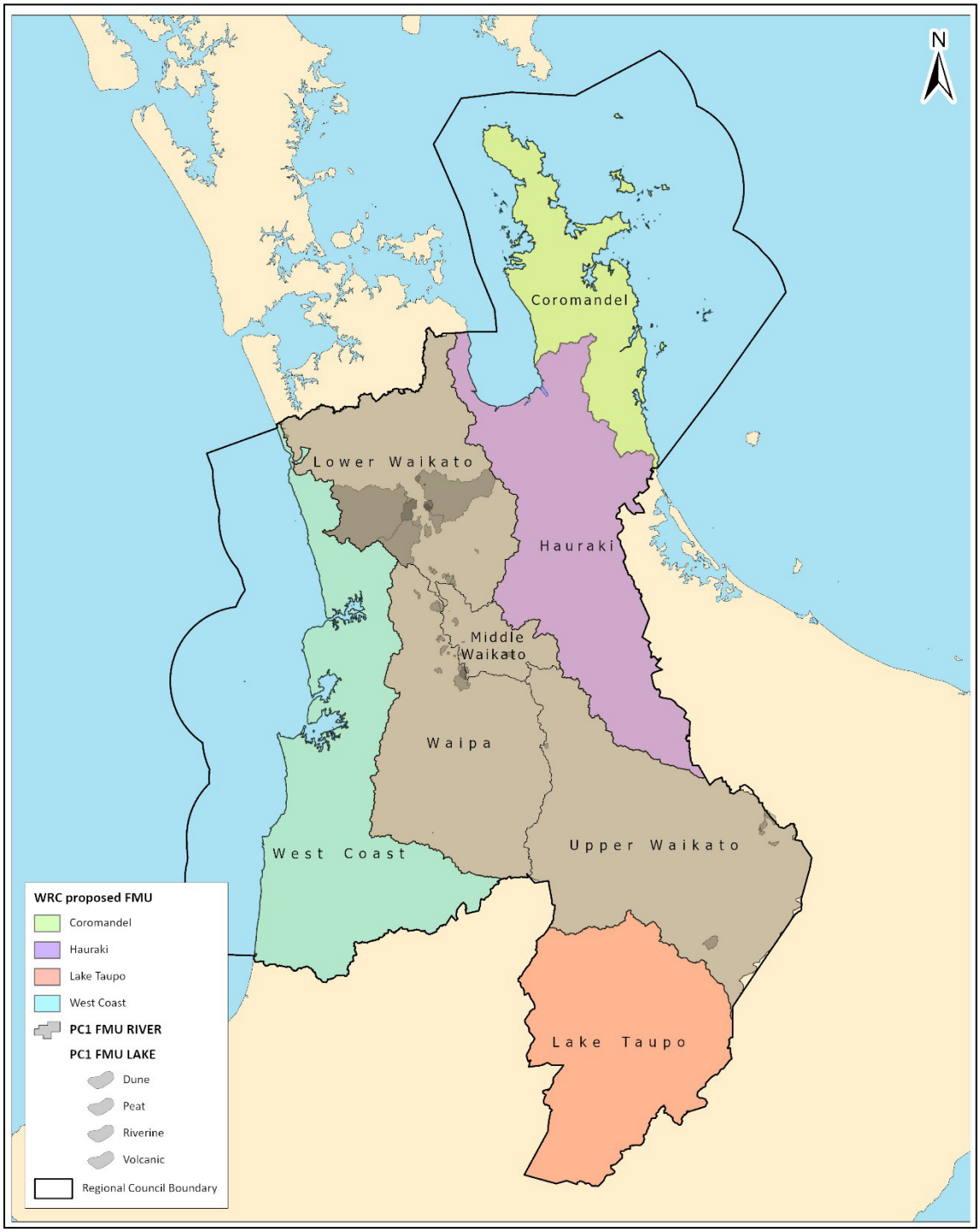
The collated feedback and spatial information will be used to inform revisions to the Waikato Regional Policy Statement and Waikato Regional Plan that will guide the management of freshwater in the region.

2 Method

Because there is significant interest and concern about freshwater regulation, especially in farming communities, the approach taken in Round 1 community engagement was to hold conversations spanning right across the planning process set out in the NPSFM 2020. The NOF process is aligned to spatial areas known as Freshwater Management Units, and so community events and the online survey were designed to ask people for spatial information relating to freshwater management in their local area. The indicative FMUs are Hauraki FMU, Waikato and Waipā (river catchment combined) FMUs, West Coast FMU, Lake Taupō FMU and Coromandel FMU (refer to Figure 1 for the indicative FMU areas). The approach to stakeholders was to invite

input with a region-wide spatial scope. The specific questions asked through each of the different types of engagement methods are included in the results section.

Figure 1: Indicative map of FMU boundaries



The qualitative data collected is themed and presented in this report. Where responses are linked to particular locations, this information will be entered into WRC spatial systems, with appropriate quality control. Where there may be concerns about the publication of particular locations of historic or cultural sensitivity, information about these sites will not be publicly available but will inform plan development. The information gathered will inform the next stages of policy development.

Some of the community feedback and comments are outside the scope of the freshwater policy review or the power/function of council. Other comments related more to the process of plan development or engagement. These have been included in the general theming of the feedback.

2.1 Online tools and website/information sheets

Some background information on the project and the NOF was provided on the WRC website about the Freshwater Policy Review and in the form of a series of information sheets.

Through EngagementHQ (an online platform), stakeholder and community engagement was supported with an online feedback form and interactive map that collected similar information to the community and stakeholder events (refer to Appendix 2 and 3 for both community and stakeholder/sector feedback forms). A link to the survey tool and interactive map was promoted on WRC's website page about the Freshwater Policy Review and also promoted at each of the community and stakeholder events/sessions held throughout the round 1 engagement period. Those who responded to the interactive map could select a pin descriptor (refer to Appendix 4) and mark the location and make a comment about that site or activity on the interactive map. The opportunity to provide feedback as part of Round 1 engagement closed on 31 July 2022.

The spatial information collected from both the online interactive tools, in the submitted feedback form and face-to-face events will be captured in the WRC spatial system.

The information collected from online feedback about special sites and features and values was evaluated against the NPSFM Appendix 1A and Appendix 1B values and themed to the relevant value or where clearly not falling within the description in the NPSFM themed to 'other'. In some instances, the reason that the community assigned a value to the particular comment was not always clear and staff endeavoured to theme appropriately. For the other information collected through online feedback regarding the current state of freshwater and desired state, actions (current or suggested for future), and limits and rules, the information has been themed and presented in this report. Additionally, emailed feedback was received from two respondents from the Waikato-Waipā FMU. The two respondents' feedback has been included and summarised together with the online feedback for the Waikato-Waipā FMU.

2.2 Stakeholder engagement

The Freshwater Policy Review stakeholder engagement in Round 1 occurred mainly via existing forums, groups and networks, with focused sessions convened both online and face-to-face from April to July 2022. The existing forums included those sectors/stakeholders that meet regularly with support from WRC, WRC committees and forums, and other sector-led groups. An invitation offering stakeholders the opportunity to discuss freshwater with staff was sent out to an email list of those previously in contact with council about other freshwater processes.

For some existing groups/forums an introductory session and presentation on the Freshwater Policy Review was added as an agenda item to existing meetings followed by a questions and answers session. The groups/forums this applied to included: the Advisory Committee for the Regional Environment (ACRE), Combined Waikato Regional Forum, Drystock Sector Group, Forestry Industry Liaison Forum, Future Proof, the Waikato Mayoral Forum and the Waikato Chief Executives Forum for territorial authorities.

For other groups/forums a facilitated session was held after the presentation on the Freshwater Policy Review. Some of these facilitated discussions were at face-to-face events and some online (Microsoft Teams). The groups/forums this applied to included: the Arable sector group, Dairy Sector Group, Territorial Authorities and the Water Users' Liaison Forum. In addition, an open combined sector introductory facilitated session was offered online. Stakeholders were also invited to complete the online regionwide survey. In the facilitated sessions, participants were asked their feedback on four areas of freshwater management. These areas included feedback on their priorities, the challenges facing their sector, work they are doing to halt degradation and improve freshwater, and ideas on how WRC should halt degradation and improve water quality through WRC planning documents (NPSFM). Note that for some, the questions varied

slightly or there were more or less, so for clarity these questions have been included in the results for each sector facilitated session. Where time was limited at events, the online tools were an option for stakeholders/sectors to answer the following questions:

- What are the freshwater challenges or issues facing your sector or industry?
- What are your sector or industry priorities for freshwater management?
- What is your sector or industry already doing to halt degradation and improve freshwater in the Waikato?
- What else should be done?
- What suggestions does your sector or industry have about how the council should manage fresh water in its planning documents to give effect to the National Policy Statement for Freshwater Management 2020 (NPS-FM)?

Where stakeholders chose not to use the online form and provided written feedback sending documents via email, these have been summarised for that sector under the stakeholder results section of this report. Refer to Appendix 1 for details of all stakeholder engagement activity.

An additional event was hosted in Matamata arising from interest following stakeholder liaison. The purpose of this two-hour workshop was to introduce the Freshwater Policy Review, and invite participants to identify freshwater recreation and or activities, special freshwater sites and features in the Matamata catchment and to answer the following questions in small group discussions:

- In terms of freshwater management, what do you think are the greatest challenges we face?
- What work are you already doing to halt degradation and improve freshwater?
- What are your ideas on how the council should manage freshwater through the region's planning documents?
- What else can we make progress with, now?

Given that the Matamata event was a mix of community and sector questions this has been reported separately in the results section of this report and not against a specific FMU, however participants were provided with maps of the Hauraki FMU and the whole region.

An open evening webinar event was offered online (Microsoft Teams). This included a presentation on the project, a presentation on regional freshwater data, and a question-and-answer session. Participants were then given guidance on how to find and use the online tools.

Data collection at facilitated online events (Microsoft Teams) included the use of virtual whiteboards where participants could post their ideas, input to the 'chat' function, and notes taken by staff during virtual sessions. In face to face facilitated events, participants were supported by staff to provide their ideas on large sheets of paper. At question and answer face to face sessions, staff took notes of the discussion. In virtual question and answer sessions transcripts were available (if recorded) and/or notes taken by staff.

For stakeholder question and answer sessions, the notes have been summarised and reported in the results section. The qualitative data from the stakeholder facilitated sessions, the online survey and written feedback via email has been themed and summarised according to the questions asked.

Altogether an estimated 220 people attended the range of stakeholder sessions either online via Microsoft teams or in person. There were also 15 stakeholder responses to the online feedback form and three stakeholder responses via email provided as written feedback.

2.3 Community engagement

The local community events addressed Te Mana o te Wai, long-term visions, values and environmental outcomes, and how to achieve them through non-statutory actions and regulatory methods. The opportunity was also taken to share information about the current state of freshwater, and to invite communities to identify their own strengths and challenges around freshwater management and what they could make progress on locally. Nine of these face-to-face one-day water workshops were held around the Waikato Region from May to July 2022 (refer to Table 1 in Appendix 1 for the event location details), with locations distributed across each of the FMUs. The workshops were guided by an independent facilitator with support from staff across the council including those from the WRC science team. Three of these events were combined with other local freshwater consultation processes; catchment management plans for west coast harbours were discussed in Whaingaroa and Kāwhia, and Te Kaupapa Kaitiaki catchment plan was addressed in Taupō.

An additional, shorter session was held in Matamata, in response to local interest identified through the stakeholder engagement process.

The Round 1 community events followed this structure:

- Introduction/ orientation session provided background about the project drivers and context, Te Mana o te Wai, and related processes.
- Participants provided feedback through a series of 'bus stop' activities related to the steps of the National Objectives Framework – important sites and features, values, state of the environment and desired state, actions and limits and rules
- Interactive afternoon session where participants engaged in formulating long-term and ten-year visions, and discussed challenges to achieving these visions, strengths working in their favour, and what they could get on with now.

The events were linked in with other council processes where possible to enhance integrated management, reduce duplication of events and be respectful of participants' time. The Kāwhia and Whāingaroa/Raglan events covered some introductory context on catchment management plans for west coast harbours, and the Taupō event included an introduction to the Draft Te Kaupapa Kaitiaki[1] that the Freshwater Policy Review will need to consider and provide for.

Altogether, an estimated 150 people attended the one-day water workshops representing members of the community, members of community groups and iwi/ hapū organisations, farmers and landowners, district and city council staff, district and regional councillors, stakeholders, agency staff, business owners, consent holders and rural professionals. Another 21 people completed an online feedback form with two more sending their written feedback via email.

2.4 Engagement activities

Refer to Appendix 1, for the community engagement event details and for the stakeholder, sector/existing groups engagement details.

[1] The Ngāti Tūwharetoa Claims Settlement Act 2018 provides for the establishment of a statutory joint committee, Te Kōpu ā Kānapanapa. The joint committee draws membership from Te Kotahitanga o Ngāti Tūwharetoa, Waikato Regional Council and Taupō District Council. A key function of Te Kōpu ā Kānapanapa is to develop Te Kaupapa Kaitiaki, a high-level plan to identify the significant issues, values, vision, objectives, desired outcomes, and other relevant matters for the Taupō catchment.

2.5 Freshwater community engagement workshops – Round 1 – data collection

2.5.1 Te Mana o te Wai - process for discussion /data collection

In Round 1 community engagement for the Freshwater Policy Review, Te Mana o te Wai was discussed with communities as an overarching concept guiding all freshwater decision-making and planning.

Local applications of Te Mana o te Wai need to be interpreted by tangata whenua, and concurrent dialogue is being progressed through an engagement stream focused on this dialogue. However, with the prominence given to Te Mana o te Wai including the hierarchy of obligations in national direction-setting, it was seen as important to the Review to also include this discussion in the community engagement events.

The Taupō community engagement event for the Freshwater Policy Review was run in conjunction with the development of Te Kaupapa Kaitiaki. This is a catchment plan being created through a co-governance structure Te Kōpu ā Kānapanapa, involving Te Kotahitanga o Ngāti Tūwharetoa, Taupō District Council and Waikato Regional Council. At the Taupō event, representatives of Te Kotahitanga o Ngāti Tūwharetoa presented to the group about the origins and aspirations of Te Kaupapa Kaitiaki, providing a tangata whenua perspective relating to waters of the Taupō catchment.

At the other eight community engagement events, the topic of Te Mana o te Wai was introduced by inviting people to discuss in pairs where they had heard the word 'mana' and what they associated with it.

Participants were then given a brief overview of the interpretation of Te Mana o te Wai in the NPSFM and asked to talk in pairs about what the concept might mean when applied to managing local freshwater. The ideas from the pairs were reported back to the group, and the notes taken form the basis of the summaries in the Results section of this report.

2.5.2 Long-term vision/s – process for discussion/data collection

The place of long-term visions in the NPSFM freshwater planning process was explained. A long-term vision was described by the facilitator based on the NPSFM as "what you want water to be like; encompassing all of our freshwater values." Participants were given some context as to the parameters set out in the NPSFM and other legislation, relating to long-term visions, namely that these visions must be:

- focused on freshwater
- ambitious but reasonable
- consistent with Te Mana o te Wai.

Long-term visions must also have a timeframe. The NPSFM requires long-term visions to have timeframes that are ambitious and reasonable, and timeframes to achieve target attribute states. There must be interim targets if the timeframe is more than ten years out.

In the Waikato and Waipā catchments, participants were reminded that Te Ture Whaimana o te Awa o Waikato – the Vision and Strategy for the Waikato River is a key overarching direction-setting document. At locations within the Waikato and Waipā catchments, they were asked to consider Te Ture Whaimana o te Awa o Waikato – the Vision and Strategy for the Waikato River and how it applied locally, and also to come up with targets that would be ambitious but reasonable to see in ten years. At community events outside the Waikato and Waipā catchments, participants were asked to craft a long-term vision statement.

The instructions from the facilitator were to work in pairs and draft their vision statements and/ or ten-year targets for freshwater. They were then invited to share in groups of four and merge their visions if they could, and then to feed back to the larger group. In addition to the main vision statements reported here, the detail in the pairs' notes have been recorded to inform policy development.

2.5.3 National Objectives Framework Steps – Process for discussion /data collection

In order to gather data to guide the freshwater policy project to complete the steps of the National Objectives Framework (NOF), participants at the community workshops were divided in groups, to circulate around 5 'bus stop' style stations (Refer to Appendix 5) representing different NOF steps. They spent 15 minutes at each station before rotating. The five stations focused on:

1. Special sites and features, including contact recreation sites
2. Values and outcomes
3. Current state of freshwater and desired state
4. Actions and action plans (current or suggested for future)
5. Limits and rules

Each station had a staff host, and information was on display relevant to that NOF step. This included, "science posters" with state of the environment information, information gathered from previous consultation processes (e.g. values and aspirations), and national context on what is regulated (essential freshwater package) and summary of current regional rules by type of activity. Two or three questions were printed out to elicit the relevant input from participants at each station (see Appendix 5). They were asked to write responses to these questions on sticky notes and place these near the questions, or onto maps if the information related to a particular location. At the attributes and targets station, there was also a scale where participants could mark the degree of desired improvement from current state.

The information collected about special sites and features and values was evaluated against the NPSFM Appendix 1A and Appendix 1B values and themed to the relevant value or where clearly not falling within the description in the NPSFM themed to 'other'. In some instances, the reason that the community assigned a value to the particular comment was not always clear and staff endeavoured to theme appropriately. For the other information collected through community events regarding the current state of freshwater and desired state, actions (current or suggested for future), and limits and rules, the information has been themed and presented in this report. In some instances, it was not clear if the comment on the limits and rules were general or if they specifically applied to existing rules. Staff have endeavoured to capture them appropriately.

2.5.4 Challenges, strengths and how to progress - Process for discussion/data collection

After crafting their long-term vision statements, participants were asked to discuss a series of questions related to how they could work locally towards these visions. Where there was a larger group size (more than ten), they were divided into smaller groups at tables and the questions were asked one at a time, allowing people to change tables and mix up their groups between questions. For smaller groups, the questions were asked as a single-group brainstorm and responses recorded by the facilitator on flip chart paper at the front. The notes have been summarised and reported according to the three questions asked of participants:

- What are our biggest challenges to achieving the visions?
- What are our greatest strengths working in our favour?
- What can we make progress with now?

3 Results – Community engagement

3.1 Lake Taupō Freshwater Management Unit – Taupō community workshop

A total of 21 people attended the local community water workshop in Taupō. The attendees included representatives of Te Kotahitanga o Ngāti Tūwharetoa (who presented), as well as farmers and landowners, stakeholder staff, agency staff, rural professionals, district council staff, district and regional councillors and community members.

3.1.1 Te Mana o te Wai

At the Taupō event, representatives of Te Kotahitanga o Ngāti Tūwharetoa presented to the group about the origins and aspirations of the co-governance catchment plan Te Kaupapa Kaitiaki, providing a tangata whenua perspective relating to waters of the Taupō catchment. This replaced the discussion on Te Mana o te Wai which took place at the other community events.

3.1.2 Long-Term Visions

Participants at the Taupō engagement event created the following vision statement:

"We see healthy ecosystems and healthy people." That vision is achieved by:

- 10% improvement across all water indicators by 2034
- No further aquatic pests.

3.1.3 Special sites and features

Participants at the Taupō engagement event identified a range of locations where they undertake freshwater recreation and or activities, special freshwater sites and features in the Taupō catchment. The freshwater locations included some of the Bays and Points within Lake Taupō, the rivers, streams and bush and scenic reserves. The freshwater locations that were identified by the participants included Okaketake stream, Whakaipo Bay, Kaiapo Bay, Waihaha river, Acacia Bay, Kuratau, Kakareamea, Tongariro river, 5 Mile Bay, Lake Rotopounamu, Motutere and Waitahanui.

Some of the reasons these sites and features are considered special included; nature, boating, relaxation, serene, it's home and a beautiful river mouth.

Where participants recorded locations and or made comments about these locations, these will be mapped and recorded in the WRC spatial system. Where there maybe concerns about the publication of particular locations of historic and cultural sensitivities this information about these sites will not be publicly available but will inform plan development.

Participants provided reasons and comments for why they may no longer use freshwater sites and places due to water quality, with responses ranging from those that felt water quality is good, to those who noted algal blooms at locations in the Taupō region, "grotty water" in summer and septic tank discharges. Sites free of weeds was also noted as a feature that supported the use of freshwater.

3.1.4 Values and outcomes

The Taupō participants assigned importance to all the four national compulsory values (Appendix 1A of the NPSFM) and noted what aspects of these values are important to them. In their responses there was a particular focus on ecosystem health and water quality, with the least comments on aspects of the threatened species value.

When asked what else do the participants value about freshwater in the Taupō FMU, the community identified natural form and character, drinking water supply and fishing in relation to the lakes, rivers, streams, wai tapu and wetlands (i.e. other values that councils must consider - Appendix 1B of the NPSFM).

The comments at the Taupō event that have been assigned to the value of fishing were protect trout spawning, top up trout and a beautiful river mouth with trout.

Participants also identified amenity and recreation values for activities not undertaken in water, such as biking and walking and included a biking trail as a site. Participants identified specific primary contact sites[2] in the FMU, including sites that are used for swimming and kayaking, boating, floating, drinking and hot rock pools. In the Taupō region, participants identified an additional value, not part of the NPFM compulsory and other values, being human contact – geothermal.

3.1.5 Attributes and targets

A few participants at the Taupō event have concerns about the current state of waterways in their FMU with mentions of sewage spills, pesticides effects on drinking water and slime. One participant responded 'nothing' and another responded 'the lake is generally good' in their feedback about concerns of the current state of waterways in their FMU.

In relation to what freshwater state they would like local freshwater to achieve, the views ranged from considering water quality perfect as is, the maintenance of current quality with one respondent also noting that quality 'would get worse for a while'. Participants also said they would like no algal blooms that are harmful to people and animals, and the need for the state to provide for safe swimming.

Generally, the Taupō one-day water workshop participants' comments suggest they are happy about the current state of the waterways in Taupō, making note of the nitrogen controls and the current work in Taupō to improve water quality. For the comments about status quo and how far the job has been done it was unclear whether these refer to water quality status quo, or how nitrogen is being managed, or both.

In terms of the question at the one-day water workshop about what water quality we should aim for in the Taupō FMU, there were a number of responses at the current state end of the scale, a similar number near the 'improve a little' moving towards the 'improve a lot'. A clarifying comment on one of the marks at the 'improve a little' point in the scale was 'especially localised effect/ urban'. The comments made also included the need to watch for trends in climate change, and that there needs to be a cost analysis of achieving the different states.

3.1.6 Current actions and action plans

The key actions already in place identified by participants at the Taupo one-day water workshop to improve freshwater were the current farming restrictions, intensification restrictions, stock exclusion from waterways, and nitrogen limits/ nitrogen allocation using Overseer. Participants also mentioned riparian planting and urban wastewater limits.

A range of other actions were suggested by participants to improve freshwater. A key theme related to wetlands including protection, restoration and education on their benefits. Funded environmental education was a strong theme either in schools, as part of a cadetship for wetland restoration, or generally, regarding wetland protection. Pest management of introduced species such as catfish and removing introduced birds off the lake was also raised a number of times. Other suggestions were for stormwater discharge improvements including a focus on sediment and erosion and accountability for sewage discharges and prevention of discharges. Other

[2] councils are required to identify primary contact sites as a special site or feature, under clause 3.8 of the NPSFM

actions included the development of farm environment plans, research into the effects of overland flow and point sources, funded planting (e.g. by tourist operators), improve lakeshore reserves, planting gully systems, supporting community groups and working with landowners (specifically those owning less than 20 hectares). There was also mention of closely monitoring activities for potential negative impacts. Examples included boat and recreational use and the removal of vegetation by property developers potentially causing harm. One other mention was to consider the management of seeps to reduce nitrogen leaching.

3.1.7 Limits and rules

There was a range of views on who and what activities need to be regulated to manage freshwater in the region. These ranged from those Taupō participants who consider that there is too much restriction to those who focused on particular activities and made suggestions about the following activity types and management tools: farm plans, land use change, discharges to water, fertiliser use, stock exclusion, the take and use of water, intensive winter grazing, farm dumps, earthworks, vegetation clearance, intensive winter grazing, use of compost, stock exclusion, pest management and wetlands.

One Taupō event respondent commented on the question on the effectiveness of the current rules as "currently overly restrictive with minimum provable results". Other suggestions included; resourcing monitoring and management, regional solutions rather than national, control and education about the plan requirements, more sediment control and restrictions on vegetation removal for property development, restrictions on pesticide use near water, placing iwi values for Wai at the top of the hierarchy, rules to clear blackberry, gorse and broom and plant natives and exclusion of introduced water fowl from water.

3.1.7.1 Farming activities and management approaches

The following specific activities and management approaches were noted by Taupō participants.

Farm land use controls:

- In relation to land use controls the Taupō attendees noted the need for models that can handle mixed land uses to support land use controls, to respect property rights and consider the economic impact of the rules and to not mix input and output-based regulations.

Farm plans:

- Participants are seeking more clarification of farm plan requirements, want consideration of the cost on farmers, want one farm plan rather than double-up with industry farm plans, and want good practice championed.

Stock exclusion:

- Views ranged from comments seeking stock exclusion from all waterways to a comment that stock exclusion has already been achieved, and some comments on setback distances.

Intensive winter grazing:

- Intensive winter grazing elicited a number of comments; one seeking enforcement of intensive winter grazing rules and another noting that winter grazing practices in Southland do not apply to Taupō.

Use of fertiliser:

- Participants felt that the use of synthetic fertiliser "compromises our brand", is problematic in pumice soils, that fertiliser use should match land use and farm systems, and that soil quality should be enhanced not fertiliser use.

Some other ideas included: banning farm offal holes and supporting farmers to extend effluent application areas.

3.1.7.2 Take and use of water

The participants' suggestions and comments about the management of take and use of water included mandating low impact design for water collection and water tanks on all new builds, that first-in-first-serve allocation does not preserve the water resource and the need to consider the climate change impact on existing take of water.

3.1.7.3 Wetlands

There were a number of comments about wetlands and carbon capture and filtration effects, the call for funding to support restoration, planting and fencing, that recognition and quantifying their filtration effects will incentivise wetlands, and that they need more protection and clearer definition.

3.1.7.4 Other discharge sources and management ideas

Some other ideas included: more stormwater protection, seeking more quantification of point source nutrient impacts on the lake and wanting hydro-power generators to "reduce sediment loss through ramping[3] of river". Other policy instrument ideas included the inclusion of water quality in quality assurance schemes (Qualmark) and the support of the use of compost derived from food diversions.

A number of ideas were raised by participants when considering values that relate to rules and limits. These included that some contaminants are there naturally so treatment plants are needed, and the need for an economic evaluation of the cost of implementation of policy. Climate change was noted, both for its effect on planning (e.g. transport, energy, land use) and the links to water in terms of climate change policy responses that are good for soil and the atmosphere are also good for water. The need for policy and funding for Te Matapuna South Taupō wetland was also identified.

3.1.8 Challenges, strengths and how to progress

The main challenge identified by the Taupō community in achieving the shared vision was the range of different perspectives and ideas within the community, coupled with a sense of complacency as the water quality in Lake Taupō is very good. Collaboration will be required to include rural and urban views as they address the challenge of educating the community about actions required to meet legislation.

The community strengths include existing collaboration with iwi, and that the Taupō community are starting from a good place with the majority recognising the importance of water quality. It is acknowledged that sound planning and action will be required to maintain actions supporting high water quality by the variety of community groups already committed to this cause.

The community can progress this by taking pride of what has already been achieved, and promoting this by telling the story, continuing to build relationships with iwi and Council, and involving young people in the journey.

3.2 Lake Taupō Freshwater Management Unit – online feedback

Three respondents from the Lake Taupō FMU provided online feedback via EngagementHQ which is reported below. The respondents' occupations were listed as retired, business manager and real estate salesperson.

[3] Ramping is where the hydro-generators ramp up or ramp down the level of water flow to suit generation needs

3.2.1 Special sites and features

The online feedback for the Lake Taupō FMU in response to activities they do on or in freshwater bodies referred to recreational fishing in Lake Taupō, Tauranga Taupō, Hinemaiaia and Tongariro.

3.2.2 Values and outcomes

For online respondents in the Lake Taupō FMU, they expressed importance to the four national compulsory values (Appendix 1A of the NPSFM). Other values were identified as important (i.e. other values that councils must consider - Appendix 1B of the NPSFM) particularly for Lake Taupō and surrounds, Waikato river and the Whareroa stream as the main waterbodies in describing the importance of the values. The other values mentioned by respondents included natural form and character, drinking water supply and animal drinking water, wai tapu, transport and tauranga waka, fishing, hydro-electric power generation, irrigation, cultivation and production of food and beverages and commercial and industrial use.

3.2.3 Attributes and targets

Online respondents in the Lake Taupō FMU have concerns with lake levels needing to be addressed to reduce erosion, not enough visible enforcement of rules and regulations, and rubbish left by travellers on the roadside eventually getting into waterways. Identified sites of concern were Lake Taupō and surrounds and all Taupō rivers.

Online responses to what they would want the waterways to look like in their area in 10 years time included: Lake Taupō and surrounds to reflect the hard work of farmers in the catchment maintaining current high levels of water quality, for it to be in a better condition that it is now, and to be as pristine as possible. Online responses to how they would like to see the waterways longer term included: for Lake Taupō and surrounds successfully completing the goals outlined in chapter 3.10 of the Waikato Regional Plan, a much improved state and “not controlled by power companies”, and to be as pristine as possible. In respect of timeframes to achieve a desired state longer term, the range of online feedback included one commenting on how the rules were already in place and farmers were exceeding the goals with results not yet visible, another sought change in 5 years and, another felt that next year would be a reasonable but ambitious timeframe.

Two online respondents were happy with the current state of freshwater bodies, while another commented that there is ‘not a lot’ that they are happy about regarding the current state and management of waterbodies.

3.2.4 Current actions and action plans

Two online respondents in the Lake Taupō FMU commented that they didn't know about or are not well informed about current action being done to improve freshwater. While one other commented on the municipal wastewater plant upgrades, farmers investing in farm management changes to prevent nitrogen leaching, farmers planting trees to reduce greenhouse gas emissions, and foresters spraying to prevent high nitrogen leaching weeds.

With regard to other actions to further improve freshwater bodies, there was a suggestion to plant trees in urban parks and to stop rubbish being left to eventually pollute waterways. Other feedback included a comment on freshwater management as not well managed, another suggesting ‘less talk and more action’.

3.2.5 Limits and rules

Online participants in the Lake Taupō FMU were clear that no additional rules were needed with one commenting on keeping the current chapter 3.10 of the Waikato Regional Plan as is and one other suggesting to “police the ones [rules] you already have”.

3.3 West Coast Freshwater Management Unit – Kāwhia community workshop

A total of 15 people attended the local community water workshop in Kāwhia. The attendees included farmers (including marine farming) and landowners, business owners, regional councillor/s and community members.

3.3.1 Te Mana o te Wai

For participants in Kāwhia, central to Te Mana o te Wai is knowing that water is life. There are certain realities we cannot change – we cannot change the weather, and indeed the rain provides plentiful water that we should be able to use and share, as long as we use it well. When we do not look after water, we lose economic opportunities as well as creating issues in our environment. We adapt to the weather by using our raincoats, and we can respond to the rain by trying to slow the movement of water down the hills, to reduce scouring by rivers and streams that muddies the harbour. We need to recognise that human activity actually is changing the climate, and this will impact on activities like marine farming. Restrictive bureaucracy can hinder people's ability to adapt, and to move marine farming activity in response to climate challenges. There was a strong sense that we are all part of the problem and the solution. With education we can take personal responsibility in all our spheres of action. At home people can reduce the chemicals used in sinks, washing machines and toilets, and on the land farmers can use less chemical fertiliser on hills, exclude cattle from streams where practicable, and manage stock on steeper country. Clean water comes from personal action - people should be encouraged to retain and store water, control animal and plant pests, and reduce sewage and rubbish. Enacting Te Mana o te Wai will restore our natural resources to the point where we can utilise them – for food, art and everything we need. The image was evoked that just as we humans have a bed, so a waterway has its bed. To be happy and healthy is to sleep comfortably in your own bed. If the water is in good condition, it will be healthy and happy in its bed. Then we can also sleep easy and peacefully in our own beds.

3.3.2 Long-term visions

Participants at the Kāwhia engagement event created the following vision statement:

"People are consulted, educated and interconnected, with pride in how they manage farming, forestry, infrastructure and waste sustainably so water and biodiversity are healthy, safe, and accessible, with abundant harvest and kai gathering."

3.3.3 Special sites and features

Participants at the Kāwhia engagement event identified a range of locations where they undertake freshwater recreation and or activities, special freshwater sites and features in the Kāwhia catchment and broader Waikato Region. The freshwater locations that were identified by the participants included the Moerangi stream, Waiteika creek and the Awaroa river, as well as other rivers, streams and estuaries.

Where participants recorded specific locations and or made comments about these locations, these have been mapped and recorded in the WRC spatial system. Comments about these locations included the enjoyment of seeing other biodiversity thriving and the many natural features and the scenery this provides. Where there may be concerns about the publication of particular locations of historic and cultural sensitivities this information about these sites will not be publicly available but will inform plan development.

Participants provided reasons and comments for why they may no longer use freshwater sites and places due to water quality, with responses ranging from those who felt water quality is good, to those who did not find it suitable for recreation due to neglect and overcrowding of

invasive weeds, a lack of management and general poor quality. This was noted in locations such as Te Puna o Rona, Kawaroa Stream, and Lagoon Spring.

3.3.4 Values and outcomes

The Kāwhia participants assigned importance to all the four national compulsory values (Appendix 1A of the NPSFM) and noted what aspects of these values are important to them. In their responses, the participants commented on aspects of ecosystem health and human contact, such as the importance of water quality to support aquatic life to being able to utilise the water through recreational activities. There was emphasis from participants on the importance of water as a life source.

When asked what else the participants value about freshwater in the Kāwhia FMU, the community identified aspects of other values that must be considered (Appendix 1B of the NPSFM) such as natural form, hydro-electric power generation, fishing, and commercial and industrial use through the mention of providing local employment through fishing and aquaculture. Participants identified freshwater sites and features within the FMU that they consider to be special. Results indicate there are a range of activities undertaken in the FMU with some participants noting swimming, fishing, and kayaking.

3.3.5 Attributes and targets

A few Kāwhia participants have concerns about the current state of waterways in their FMU. Some of the concerns raised by participants about the current state of waterways in Kāwhia included Canada Geese being a risk to kaimoana, lack of traditional knowledge to care for waterways, and sewage and sediment concerns.

In relation to what state they want local freshwater to achieve, there was a suggestion for more water quality monitoring. Participants also said that they would like to see more animal pest control regarding E. coli levels and to meet obligations in an agreed timeline.

Generally, the participants' comments suggest there are aspects about the current state of waterways in Kāwhia that they are pleased with. A few participants made comment on farming practices and that "fencing and planting is being achieved by farmers." Another participant stated they felt the Awaroa river is at a healthy state.

In terms of the question about what water quality state should be aimed for, the few responses ranged higher on the scale between 'improving a little' moving towards 'improving a lot'. One commented on aiming for excellence but in respect of economic and personal circumstances.

3.3.6 Current actions and action plans

Current actions or activities described by participants to improve freshwater included fencing and planting, education and involvement in catchment, protection or care groups. There were comments about replanting dunes and native planting. A range of different groups were mentioned including the North Kāwhia Harbour care group, the harbour protection society and new catchment groups that had been formed in South and North Kāwhia and Marokopa. Other actions included involvement in farm planning and greenhouse gas workshops. The online respondent mentioned fencing and planting, but stated that not enough had been done.

There were a number of responses from participants when asked what other actions could be done to improve freshwater. These included access to funding and providing incentives to address issues. Opportunities to work more together was suggested, whether collaboratively with other agencies or at a community level between rural and urban dwellers. There was feedback about having more education ranging from whānau learning about native resources, providing an educative supported approach rather than regulation, and regular six-monthly communications to gain an understanding of the local context between the council and the community. There were also comments about improvements to pest management for geese,

goats and other pests. Other actions included having access to recycling, more water quality testing, water conservation and rainwater collection. In regard to planting there was a suggestion to include native planting in restoration plans, and queries on riparian management (regarding survey subsets representation of what's happening in those areas) and the effects of pine plantations.

3.3.7 Limits and rules

There was a range of views on who and what activities need to be regulated to manage freshwater in the region. The feedback from participants focussed on the following activity types and made suggestions about associated rules and management tools:

- farm land use controls, and
- earthworks, vegetation and land disturbance.

Farm land use controls
One participant suggested that forestry and dairy should be regulated "for the good of the people." There was a suggestion from a participant that when rules for farming land use expire, there should not be a one size fits all approach on the basis that there needs to be flexibility to manage issues on individual farms, and appropriate land use.

Earthworks, vegetation clearance and land disturbance
Comments from participants on these types of activities were general in nature, however sought management of forestry effects on "the harbour".

Overall, comments made by participants were more general, but stated that there needs to be clarification for what is required of landowners and what they need to do. One participant questioned if the plan will take into account the unique characteristics of each different area for management rather than a blanket approach.

3.3.8 Challenges, strengths and how to progress

The Kāwhia community recognises that people hold different views and the challenge will be to develop a shared vision. The identification of measurable goals in order to demonstrate progress will also need time and money.

The strengths are seen to be the resilience of the community, and that the people in this small, interconnected community are already caretakers of the land and harbour in order to survive. To progress this kaupapa now, the community can provide useful information to support people in the community continue with fencing to retire slopes prone to erosion, propagate native plant species and protect the existing varieties.

3.4 West Coast Freshwater Management Unit - Whāingaroa Raglan community workshop

A total of 19 people attended the community water workshop in Whāingaroa Raglan. The attendees included farmers and landowners, iwi, community organisations/community board, district and regional councillors, and community members.

3.4.1 Te Mana o te Wai

In Whāingaroa, participants made links between seeing water as a resource or commodity to use, and its current state of contamination. They referred to alternative viewpoints more aligned with Te Mana o te Wai, such as giving rivers legal 'personhood'. Participants expected pressure to grow as populations increase and the climate changes. They saw the root of the issue as people, and their disconnection from the water, and therefore people need to reconnect, and live more closely with the water. It was observed that there has been an intentional breakage of the link between those holding mana whenua and the wai. The concept of flow was a common theme – that as an awa flows down the catchment, it will change, and

the water provides a picture of what is happening in the catchment. The ability of water to flow and change also means it has the mana to repair itself, if not too degraded. Therefore participants said we need to let rivers be, but put policy around the people.

3.4.2 Long-term visions

Participants at the Whāingaroa engagement event created the following vision statements:

"Our waterways and wetlands are clean and healthy, supporting a thriving environment and community"

"When the community care for the water, the water cares for the community.
Me he taonga te wai, me aha te tangata, e ora ai?"

"Making polluters pay for restoration to improve water so it's safe to swim and gather kai" (80 years?) "Regular education and review of standards means we are all taking part" (20 years?)

3.4.3 Special sites and features

Participants at the Whāingaroa engagement event identified a range of locations where they undertake freshwater recreation and or activities, special freshwater sites and features in the Raglan catchment and broader Waikato Region. The freshwater locations included the Wainui Stream, Opotoru River, Bridal Veil Falls, and Toreparu Wetland, as well as other lakes, rivers, streams and scenic reserves.

Where participants recorded locations and or made comments about these locations, these have been mapped and recorded in the WRC spatial system. Comments about these locations included the scenery surrounding the waterbodies, along with the source of mahinga kai that can be provided and the human connection to activities surrounding these waterbodies. Where there may be concerns about the publication of particular locations of historic and cultural sensitivities this information about these sites will not be publicly available but will inform plan development.

Participants provided reasons and comments for why they may no longer use freshwater sites and places due to water quality, with a range of responses such as wastewater requiring removal, "dirty" looking water, and general concern about water quality. These locations include Okete Stream and Okete Falls.

3.4.4 Values and outcomes

The Whāingaroa participants assigned importance to all the four national compulsory values (Appendix 1A of the NPSFM) and noted what aspects of these values are important to them. In their responses, the participants commented on aspects of the values (Ecosystem health, Human contact, Threatened species and Mahinga kai). Their responses ranged from a focus on water quality, providing a safe habitat for biodiversity through to concern for threatened species.

When asked what else the participants value about freshwater in the Whaingaroa FMU, the community identified aspects of other values that must be considered (Appendix 1B of the NPSFM) such as natural form and character, drinking water supply, and fishing. Participants identified freshwater sites and features within the FMU that they consider to be special, with some participants noting swimming, fishing, and kayaking. Participants also identified amenity and recreation values for activities such as bush walking alongside water.

3.4.5 Attributes and targets

There were some concerns about the current state of waterways in the Whāingaroa area with participants commenting on concerns surrounding pests and invasive species, sediment and erosion in waterways, solids in rivers, a lack of fencing, estuarine water quality, water clarity,

and nitrogen in rivers. Locations were listed for these concerns such as Wainui Stream, Waingaro, and Tarata Stream. One participant also voiced concern over a lack of iwi engagement and co-governance for decision making.

In relation to what local freshwater state they would like to achieve, comments ranged from one participant stating they would like their local freshwater to be in the top 25% of sites, to some commenting that they would like to restore native plants that originally belonged to the area and restore the presence of native species such as freshwater shrimp and eel. Other comments included participants wanting 20 metres minimum of riparian planting, and to restore the Mauri of the area. A timeframe suggested for drinkable water (assuming from waterways) was 50-100 years.

Generally, the participants comments suggest they are happy about the current state of the waterways in Whaingaroa making note of bush cover in the upper areas of various streams, and the presence of threatened species. One commented on how they were happy to see the streams flowing. Another commented that they were pleased with the water quality for recreational purposes and one participant was pleased with the support received for fencing rural waterways.

3.4.6 Current actions and action plans

Current actions or activities described by Whāingaroa participants to improve freshwater included: fencing and planting by farmers and also planting initiatives through the local Raglan Area School. Animal and plant pest management were also mentioned through local groups and iwi including Te Iwi Tahi Trust, Karioi Project Predator Control, and Friends of Wainui Bush Park. Educational support was also provided through the Whaingaroa Environment Centre and through Xtreme Zero Waste regarding less litter and dumping.

There were a number of responses from participants when asked what other actions could be done to improve freshwater. These included resourcing and funding such as funding local groups to create nurseries and accessing eco-sourced plants. More education was suggested with schools, and with communities regarding the issues as well as providing training opportunities for rangatahi and tangata whenua. Iwi, tangata whenua and mana whenua involvement was encouraged as well as supporting co-governance in decision-making. Working together and connectivity was mentioned either between district and regional council in collaborative policy making, or with communities and with iwi. Other actions included exploring options to reduce erosion, animal and plant pest management, forestry setbacks, access to information, stormwater and wastewater treatment, and managing freedom camping.

3.4.7 Limits and rules

There was a range of views from Whāingaroa participants on who and what activities need to be regulated to manage freshwater in the region, these included suggestions about the following activity types and management tools: farm plans, farming land use change, discharges to water, contaminated land, stock exclusion, the take and use of water, intensive winter grazing, earthworks, vegetation clearance, agrichemicals, stock exclusion, and wetlands.

Farm land use controls:

- In relation to land use controls, the participants made general comments and suggested reducing stocking rates for winter grazing to maintain ground cover. Other comments included the suggestion of replacing stock farming with better options.

Farm Plans:

- Participants are seeking more clarification of farm plan requirements, for example if these would affect home gardens greater than five hectares.

Stock exclusion:

- A participant commented that stock exclusion from waterways provides integration of freshwater and harbour.

Intensive winter grazing:

- Participants made general comments such as suggesting the reduction of stocking rates for winter grazing.

Earthworks, vegetation clearance and land disturbance:

- Participants commented on the need to protect coastal wetlands and to improve monitoring of pine forest removal.

Discharges to water:

- Participants commented on whether a sewage pipe would need to be managed 100m back from discharge. Another participant mentioned that they did not feel that discharges to water was effective as sewage leaks in wetlands.

Contaminated land:

- Participants suggested the idea to "stop encouraging the contamination of land and sea."

Structures in waterways:

- Participants made general comments as well as the suggestion to ensure culverts don't impede fish moving inland.

At a general level, participants sought that WRC undertake monitoring (including monitoring of groundwater during droughts) and enforcement, that resourcing is provided for regulatory processes, and that this process considers ki uta ki tai – that we look after the water from the mountains to the sea (including estuaries).

3.4.8 Strengths, how to progress and changes needed

Raglan community members reported key strengths related to high levels of iwi engagement and the willingness of the community to be open to change. It was noted that people are passionate about the environment, and the community want to speak up and raise awareness of the plight of freshwater. There is recognition that development is not a huge constraint as it might be in other areas, and community members support community engagement which is evidenced through a number of existing groups such as Xtreme Zero Waste, Raglan Naturally, Whāingaroa Environment Centre, and Whāingaroa Harbour Care. Raglan community members feel fortunate to have a Māori worldview with strong relationships supported by the Treaty and co-governance arrangements.

There is already a lot happening and this needs to be acknowledged through various means, one being the suggestion of an education campaign to raise awareness of the great work already happening locally, the continued need for behaviour change, and to celebrate current practices. These include no spray in waterways, catchment plans which address nutrient and flow allocation, and ensuring that where development happens there is a clear link to environmental practices that improve freshwater. Further funding and support will be needed for local organisations, iwi and hapū to do the mahi locally. Funding can also be focussed on now to provide for long-term options, including collaboration, ongoing governance and Treaty partnership approaches. Regional council can support this work by setting realistic baseline targets and rules for water clarity and nitrates, together with ongoing monitoring and enforcement.

In answer to the question "what needs to change to achieve this?" the community recognises the need to adopt a vision that everyone can identify with and commit to. The need to change

attitudes through education and raising awareness about the importance of water, and encourage behaviour change around values associated with ecology were also highlighted. There was support for co-governance and building capacity for local communities to be involved with local decisions, including research to measure and monitor data to report on progress.

3.5 West Coast Freshwater Management Unit – online feedback

Two respondents from the West Coast FMU provided online feedback via EngagementHQ as reported below. The respondents' occupations were listed as farmer/hapū researcher and medical academic.

3.5.1 Special sites and features

When asked what activities they do on or in freshwater bodies one respondent commented they were active with predator trapping, fencing, invasive weed eradication, eeling, whitebaiting in Toreparu. The other referred to recreational swimming and kayaking in Pakoka river.

3.5.2 Values and outcomes

In online feedback from the West Coast FMU for the four national compulsory values both respondents identified ecosystem health and human contact as important, and one respondent viewed threatened species and mahinga kai values as important to them.

Other values were identified as important (i.e. other values that councils must consider - Appendix 1B of the NPSFM) particularly for Toreparu wetland, Wairēnga reserve, Waimāori river and Pakoka river as the main waterbodies in describing the importance of the values. The other values mentioned by respondents included natural form and character, wai tapu, transport and tauranga waka, and fishing.

3.5.3 Attributes and targets

In regard to concerns about the current state and management of waterways in their area, one respondent was concerned with nutrients, predation of native species by introduced species, the release of pigs, deer, pheasants into fragile ecological areas for hunting purposes, the introduction of grey willow by local bodies to combat erosion around the Toreparu. The other respondent was concerned that both fencing and planting needed to be developed particularly along Pakoka river.

One online response to what they would want the waterways to look like in their area within 5-10 years included having sustainable ecosystems and waterways being safe for human contact. The other respondent wanted waterways in their area to be predator free, willow free, perimeter fenced, clean, replanted in native species, and a safe habitat for all wetland birds to live and thrive all within 10 years.

In regard to what they are happy about with the current state and management of freshwater bodies in their area, one respondent commented on the fencing of stock and riparian planting. The other respondent commented 'no'.

3.5.4 Current actions and action plans

Current actions respondents know about include farmers working with WRC to fence off their farm blocks that adjoin wetlands and fencing and planting in general (noting more needed to be done). Other actions noted were more funding, reduce intensive dairying and to get communities involved, e.g. in riparian planting.

3.5.5 Limits and rules

One online respondent suggested placing limits on dairy cow density near waterways as an additional rule. The other suggested that rules needed to be applied nationwide to be effective and recognition by all local bodies that 'water is life' as a start.

3.6 Waikato-Waipā Freshwater Management Unit and West Coast FMU – Te Kūiti community workshop

A total of 20 people attended the Te Kūiti community water workshop. The attendees included farmers and landowners, staff from Maniapoto Māori Trust Board, members of community groups, stakeholder staff, agency staff, rural professionals, rural advocacy, district and regional councillors, and community members.

3.6.1 Te Mana o te Wai

In Te Kūiti, the roots of Te Mana o te Wai in whakapapa were acknowledged, and reference made to Te Tiriti o Waitangi settlement documents that speak to the health of both water and people. Water was recognised as essential for life, having many uses, and associated with places that are special to individuals and the community. People heard in Te Mana o te Wai a call to reassess how we think about water, and not to take it for granted. An example provided was the changing perspectives on Whangamārino wetland – from seeing it as a swamp or drainage area, to appreciating its value as habitat for birdlife and as a filter to naturally cleanse water. Along with this shift in attitudes, participants noted better decisions being made, such as fencing waterways and using sediment traps. As changes in farm practices occur, people expect that the farms themselves would have greater mana. They wanted all impacts on water to be addressed, including from urban areas and roads, so that everyone is working together to uphold Te Mana o te Wai.

Participants in the Te Kūiti workshop included residents of the catchments of the Waipā river as well as rivers flowing out to the west coast. There was general support from a few participants for Te Ture Whaimana o te Awa o Waikato – The Vision and Strategy for the Waikato River and its Objectives, as long as people could have flexibility in how to work towards it, customising actions for their own circumstances.

3.6.2 Long-term visions

There was support from participants at the Te Kūiti engagement event for Te Ture Whaimana o te Awa o Waikato – the Vision and Strategy for the Waikato River – with provisos/comments described, and local expressions of this vision as follows.

The vision statements created were:

“Thriving, resilient waterways reflect thriving, resilient communities.”

“Through Kotahitanga and Mātauranga, together we will enhance the mauri of the water.”

“Our vision is to have a prosperous community that protects, promotes, and revitalises the Awa that runs through it for generations to come.”

3.6.3 Special sites and features

Participants at the Te Kūiti engagement event identified a range of locations where they undertake freshwater recreation and or activities, special freshwater sites and features in the Te Kūiti catchment and broader Waikato Region. The freshwater locations included the Waikato River, Mokau Estuary, Awakino River, as well as other rivers, streams and scenic reserves.

Where participants recorded locations and or made comments about these locations, these have been mapped and recorded in the WRC spatial system. Comments about these locations included the connection for people and the scenery that it provides. Where there may be concerns about the publication of particular locations of historic and cultural sensitivities this information about these sites will not be publicly available but will inform plan development.

Participants provided reasons and comments for why they may no longer use freshwater sites and places due to water quality, with responses ranging from those who felt water quality is good, to those who did not find it suitable for swimming due to dead fish, weeds, and sediment build up in locations such as Karāpiro, the Mōkau estuary and Lake Ngāroto.

3.6.4 Values and outcomes

Te Kūiti participants assigned importance to all the four national compulsory values (Appendix 1A of the NPSFM) and noted aspects of these values that were important to them. In their responses, the participants commented on aspects of these values (Ecosystem health, Human contact, Threatened species and Mahinga kai). Their responses ranged from a focus on water quality to the spiritual and physical connection with the water.

When asked what else the participants value about freshwater in the FMU, the community identified aspects of other values that must be considered (Appendix 1B of the NPSFM) such as natural form, drinking water supply, irrigation, hydro-electric power generation, animal drinking water, commercial and industrial use and fishing. Participants identified freshwater sites and features within the FMU that they consider to be special, particularly for activities such as swimming, fishing, and kayaking. Participants also identified amenity and recreation values for activities on land such as biking.

3.6.5 Attributes and targets

A few Te Kūiti participants had concerns about the current state of waterways in their FMU. Some of the concerns included: contamination in regard to dead cattle, and faecal matter in the waterways, as well as the health impacts of contamination causing rashes from swimming. Weeds in riparian areas were a concern limiting access to waterways. Fallen trees were also mentioned causing flooding. Nitrogen leaching in the Waikato catchment, phosphorus levels, and levels of sediment in some west coast rivers were other concerns. There was also mention of high rainfall effecting water quality, access to science information and user-friendly information (for farmers). There was a comment about the trend information provided at the Te Kūiti event with one participant querying whether the science information sheet showed a true indication of the erosion trends.

In relation to what local freshwater state they would like to achieve, there were comments about reducing sediment and *E.-coli* over a 20-year timeframe, eradicating trout, and more science and testing sites. Macroinvertebrate community index (MCI) levels were also mentioned with one participant aiming for levels at no less than 90 in Mōkau and tributaries and another commenting on aiming for levels greater than 100 within 50 years. Another participant commented on supporting and funding wetland restoration and one other mentioned maintaining quality.

Aspects participants are happy about regarding the current state of the waterways they would like to retain included continued monitoring, increasing eel numbers, current MCI levels on farm, and catchment group support. One participant was happy with the nitrogen and phosphorus levels in the waterways and another participant noted that they felt the water was reasonably clean during low rainfall.

In terms of the question about what water quality state should be aimed for, the few participants who responded chose the lower range between ‘improve a little’ and ‘improve a lot’.

3.6.6 Current actions and action plans

Current actions or activities described by Te Kūiti participants to improve freshwater included: fencing and planting as well as targeted funding of fencing and planting, protection of native bush, and monitoring and water testing. Education and workshops were also mentioned with regard to forestry and greenhouse gases, as well as working closely with locals and involvement with catchment groups. Other actions included the development of Farm Environment Plans, catchment plans and nutrient budgets. Reticulated stock water sources were also mentioned.

There were a number of responses from participants when asked what other actions could be done to improve freshwater. These included: pest management such as eradicating koi carp on the west coast and pest management associated with planting. A common theme also was working together in having connectivity and providing stronger support for rural communities. An example was assisting hapū or landowners with succession planning. An integrated approach was also mentioned 'from the headwaters to the sea', an integration of work and data and what can be done on the ground, more science and support regarding catchment plans and access to science at a local level regarding water quality. Utilising technology (integrated geographic information system) was suggested, to quantify and measure impacts of restoration works as well as having more funding support and more staffing resources for the West Coast. There were also other mentions of the Dairy Environment Leaders Group, the Ballance Farm Environment awards and the Maungatautari Pirongia Ecological Corridor.

3.6.7 Limits and rules

There was a range of views from Te Kūiti participants on who and what activities need to be regulated to manage freshwater in the region. These ranged from those who wanted, "more education, less rules for now," to those who commented on particular activities and made suggestions. These centred on the following activity types and management tools: farming land use change, fertiliser use, discharges to water, contaminated land, stock exclusion, the take and use of water, structures in waterways, vegetation clearance, stock exclusion, and wetlands.

Farm land use controls:

- In relation to land use controls, the participants made general comments and suggested "better rules for short-term effect for long-term gain." There was a strong suggestion from multiple participants to have clearer definitions of when a consent is required or not, and providing justification for consenting.

Farm plans:

- Participants made generalised comments as well as stating confusion with different rules currently in place in different areas and suggested more support for all land use types.

Stock exclusion:

- Participants commented that sheep grazing to stream is good for stock exclusion for waterways, and many wanted to keep the rules around sheep being allowed to graze near waterways. Another suggestion was for pest management of exclusion areas.

Earthworks, vegetation clearance and land disturbance:

- A participant commented that there is a grey area around some short-term damage for long-term gains and that there can be perverse outcomes created when rules capture some activities e.g., sediment traps.

Take and use of water:

- The participants commented that they were unsure if irrigation for pasture is a good use of water and that there needs to be more tanks in urban areas for storage.

Discharges to water:

- Participants suggested that everyone needs to be responsible for their own contaminants. Another participant mentioned that there is confusion regarding cleaning out drains. Finally, a participant commented that current discharges to water rules are not working well in urban centres.

Fertiliser use:

- Participants made several comments and suggestions regarding the use of fertiliser. There was uncertainty as to how farmers were to report the use of nitrogen fertiliser under the National Environmental Standard for Freshwater (regulations), and mention that rules should reflect local conditions and receiving waterbodies. The Waikato Regional Plan was preferred (the authors assume that this compared to the NESF) in relation to managing nitrogen.

Participants also provided general feedback on current rules and regulations, including those that manage earthworks, vegetation clearance and land disturbance.

3.6.8 Challenges, strengths and how to progress

Challenges to achieving the vision in Te Kūiti focused on the need for more education to address apathy, reduce polarised views and assist people to understand the issues and the potential solutions. The use of farm plans and funding support to implement these were also discussed. Resources such as time, information and labour were also seen as challenges in implementing policy and legislative changes.

The strengths of this community are that they are a strong, connected community, with existing catchment groups and landholding decision makers wanting to leave things better than they found it. There is a high level of knowledge and understanding, coupled with recognition that there needs to be change. The participants noted that a change in attitude has already been achieved by the majority, supported by strong relationships and collective knowledge.

To progress things now, there will need to be more collaboration with other groups, individuals, iwi and agencies to focus on understanding emissions (including greenhouse gases), provide education on mitigation options, reduce duplication and focus on implementation. Involving young people will be important to promote the understanding that return on environment is just as important as return on investment.

3.7 Waikato-Waipā Freshwater Management Unit – Tokoroa community workshop

Eleven people attended the Tokoroa community water workshop. The attendees included farmers and landowners, members of community groups, stakeholders (including financial company), district council staff, regional councillors and community members.

3.7.1 Te Mana o te Wai

Participants in Tokoroa associated Te Mana o te Wai with their direct and powerful experiences of being in the presence of natural waterbodies. They connected this to a sense of peace and naturalness and found that this experience uplifted their own wellbeing. Another connection was to health – with the example given that clean and healthy kai from the water (watercress) lifted mana. It was observed that for Māori, disconnection from their wai could result in a loss of mental health and devastating outcomes such as suicide. There was some reaction to the interpretations of Te Mana o te Wai provided in the government directions. For one participant, the 'hierarchy of needs' did not feel consistent with their own concept of the spirit connection between people and natural resources, and Te Mana o te Tangata, which to them had no less consequence than Te Mana o te Wai. For another, the concern was with the way rules could be imposed from above (e.g. by Taumata Arowai) and get in the way, losing the small people below.

Some wished to see the health of the community and economy prioritised alongside the health and wellbeing of the water bodies.

In considering Te Ture Whaimana o te Awa o Waikato - the Vision and Strategy for the Waikato River, people saw this as an expanded and locally applied version of Te Mana o te Wai. They could see links between Te Mana o te Wai and the wording of the Objectives of Te Ture Whaimana - the Vision and Strategy in terms of the restoration of health and wellbeing, and placing a high value on the water. The emphasis on inter-relatedness in Te Ture Whaimana - the Vision and Strategy was noted. It was observed that the wording of both the national and regional documents remains conceptual, and to some extent there are competing objectives. The participants noted the challenge will be to translate these concepts into plans that give meaning to ideas such as 'health and wellbeing' and allow for the practicalities of achieving change (with scope to do so by moving timelines). There was some discomfort expressed by one participant with the way they felt that Māori and community were addressed through separate Objectives in Te Ture Whaimana - the Vision and Strategy; in discussion, an alternative view was that this provides for greater richness.

3.7.2 Long-term Visions

There was recognition of Te Ture Whaimana o te Awa o Waikato – the Vision and Strategy for the Waikato River as an expanded and applied version of what Te Mana o te Wai means locally.

Participants in Tokoroa created the following vision statements:

"He Wai Māori." This was explained as allowing water to be itself, in its common, ordinary or normal state, unconstrained, flowing naturally, and through our everyday lives.

"A strong connection between environmental health and social expectations leading to water quality improvements and accountability."

"To protect and enhance our water through development and social awareness and clear rules (applicable to all); to model by our actions and care about our resources; to inform of the consequences of not doing it."

10-year targets were discussed where rivers, lakes to Karapiro and streams in this area (South Waikato) were swimmable in summer as well as having a measurable improvement in biodiversity and reduction in pressures from pest species over 10 years.

3.7.3 Special sites and features

Participants at the Tokoroa engagement event identified a range of locations where they undertake freshwater recreation and or activities, special freshwater sites and features in the Tokoroa catchment and broader Waikato Region. The freshwater locations included Mangakino, Te Waihou River and Lake Arapuni, as well as other lakes, rivers, streams and scenic reserves.

Where participants recorded locations and or made comments about these locations, these have been mapped and recorded in the WRC spatial system. Comments about these locations included the connection to the activities that take place in or on the water, as well as the scenery that is provided and enjoyed by the community. Where there may be concerns about the publication of particular locations of historic and cultural sensitivities this information about these sites will not be publicly available but will inform plan development.

Participants provided reasons and comments for why they may no longer use freshwater sites and places due to water quality, with responses ranging from those who felt water quality is good, to those who did not find it suitable for fishing due to a lack of fish, or unsuitable for swimming due to weed growth, algal blooms, and sediment build-up. These locations included Little Waipā, Lake Waikare, Lake Ngāroto, Whakauru Stream and Karāpiro.

3.7.4 Values and outcomes

The Tokoroa participants assigned importance to all the four national compulsory values (Appendix 1A of the NPSFM) and noted what aspects of these values are important to them. In their responses, the participants commented on aspects of the values (Ecosystem health, Human contact, Threatened species and Mahinga kai). Their responses ranged from a focus on water quality for swimming, to mahinga kai, and supporting threatened species.

When asked what else the participants value about freshwater in the Tokoroa FMU, the community identified aspects of other values that must be considered (Appendix 1B of the NPSFM) such as commercial and industrial use, natural form and character, animal drinking water, and fishing. There are a range of activities undertaken in the FMU and other parts of the region, with some participants noting swimming, fishing, eeling and boating. Participants also identified amenity and recreation values for activities on land such as biking.

3.7.5 Attributes and targets

A few Tokoroa participants had concerns about the current state of waterways in their FMU. Some of the concerns included: point source discharges in regard to factory discharges onto pumice land already losing nitrogen, and industrial and municipal discharges into local rivers. A participant noted that the 'Tokoroa treatment station processed about 20,000 cows equivalent of phosphorus; and 3000 cows of nitrogen' with one other concerned about the discharges of human-related nutrients such as phosphorus and nitrogen. There was also concern regarding the sources of cyanobacteria, and the levels of E. coli off streets. Concern was raised about the weeds and sediment in the hydro lakes making it uncomfortable to swim in, and nutrient effects on human health and ecosystems.

In relation to what local freshwater state they would like to achieve, there were comments about aiming for swimmable as a bottom line, and swimmable in summer with a 10-year timeframe. Cyanobacteria levels were also mentioned with one commenting on achieving a C (band) state or better (mindful that the catchment may have never been at that level) and another aiming for a B (band) state. Other mentions included water clarity, temperature and rubbish removal from streams.

Aspects participants are happy about regarding the current state of the waterways they would like to retain included access and swimming, with one other commenting that they were generally happy.

In terms of the question about what water quality state should be aimed for, most responses sat at the higher range of 'improving a lot' with one response at 'improving a little'.

3.7.6 Current actions and action plans

Current actions or activities described by Tokoroa participants to improve freshwater included changes to farming systems such as less stock and lower input systems, planting, stock exclusion and wastewater upgrades. Community projects were also mentioned e.g. Pokaiwhenua and Matarawa Streams, funding support through the South Waikato Environmental Initiatives Grant Funding and wetland protection and restoration throughout Kinleith forest. The community rubbish collection was also another action mentioned.

There were a number of responses from participants when asked what other actions could be done to improve freshwater. These included: wastewater upgrades, identifying sources of pathogens, recycling of nutrients with one suggesting recycling from Tokoroa treatment stations, addressing micro-plastics in effluent and biosolids and making operational changes. Other suggestions included a focus on non-point discharges and regular review of water takes to avoid excess use. Working strategically and collectively was recommended as well as reporting back to communities and iwi on the monitoring, progress and outcomes for their FMU in regard to the Freshwater Policy Review.

3.7.7 Limits and rules

Tokoroa participants provided a range of views on who and what activities need to be regulated to manage freshwater in the region. These focussed on particular activities with suggestions about the following activity types and management tools: fertiliser use, discharges to water, the take and use of water, farming land use change, and wetlands.

Farm land use controls:

- In relation to land use controls, the participants made general comments and suggested follow-up conversations to occur following land consent conditions, and that the framework needs to be flexible to allow for land use conversion (will provide positive outcomes).

Wetlands:

- Participants commented that rules over the clearance of wetlands "hamstring projects to deal with plant pests on economic and practical levels."

Take and use of water:

- The participants commented that they were unsure if irrigation for pasture is a good use of water and that there needs to be more tanks in urban areas for storage.

Fertiliser use:

- There was the suggestion for nitrogen rules to apply to all sources of nitrogen and all land uses.

3.7.8 Challenges, strengths and how to progress

Participants noted that the biggest challenges facing people in Tokoroa were related to currently having no shared vision, and how to bring together the differing views held within the community to bring about a change in attitude and willingness to change. It was felt that some are fearful of change and the impact it will have on individuals, families and community organisations.

The strengths working in their favour included the people themselves and the respect they hold for each other and the different cultures and worldviews within the community. The plan change is seen as an opportunity to promote more awareness of environmental issues, support for natural resources and the economic opportunities that may be affected by positive change.

The community can progress this now by holding more forums to include community engagement and education in order to build the capacity and capability of people. This focuses on investing in their greatest resource, the people, to hold themselves personally accountable and highlight existing actions.

3.8 Waikato-Waipā Freshwater Management Unit – Kirikiriroa Hamilton community workshop

A total of 21 people attended the Kirikiriroa Hamilton community water workshop. The attendees included community members, farmers, and landowners, iwi/hapū , members of community groups, stakeholders (including energy sector), agency staff, city council staff, a public health representative, university staff, and regional councillors.

3.8.1 Te Mana o te Wai

For Hamilton participants Te Mana o te Wai means protecting and enhancing the quality and life force of the water and restoring its mauri. Water is essential and should be treated as such. Recognising interconnectedness and how water sustains life, participants said that if we get the waterway healthy, all other things will flow from it. This means that the first thought should be

for the water bodies we impact, and that people will need to accept constraints to protect the wai and change their behaviour for the wai. At a planning level, consideration must be given to a more efficient and effective water use framework that embraces both water quantity and quality (including water storage). The order of the hierarchy of Te Mana o te Wai generated some questions, for example in recognising the role that water plays in emergency management. They said that reality of implementing the 'political wish' of Te Mana o te Wai implies finding a practical point of balance between degraded and pristine states.

In relation to Te Ture Whaimana o Te Awa o Waikato - the Vision and Strategy for the Waikato River, the comment was made that given the status of this document and the work done with it through the proposed Plan Change 1 process, it would be most time and resource efficient to continue to use that current wording.

3.8.2 Long-term visions

There was support from some Hamilton participants (as a pragmatic approach to save time and money) for adopting a vision based on Plan Change 1 and Te Ture Whaimana o te Awa o Waikato – the Vision and Strategy for the Waikato River.

The vision statements created by Kirikiriroa participants were as follows:

"Healthy water supporting healthy communities (economic, social, cultural, future generations)"

"The landscape vista from mountains to sea is a mosaic of resource use, diverse and different, within the capability of land not to breach or exceed ecosystem health limits."
Recognising:

- Gradient of opportunity
    - Low land – hill/ high country
    - Versatile – less versatile
- Must be enabling
- Cannot lock in existing land use

Ten year targets were discussed including "% improvement in all aspects of freshwater across the region in 10 years." [Science to inform what is an appropriate percentage] and having a "policy and planning framework in place that would see achieving the Vision and Strategy in 80 years." This required accurately measuring the required changes, processes to achieve the vision through innovation and collaboration and utilising technology to efficiently measure/monitor and manage freshwater and the impacts of climate change.

3.8.3 Special sites and features

Participants at the Kirikiriroa Hamilton engagement event identified a range of locations where they undertake freshwater recreation and or activities, and special freshwater sites and features in the Kirikiriroa Hamilton FMU and broader Waikato Region. The freshwater locations included the Waikato River, Waipā peat lakes, Blue Springs, Lake Karāpiro, and the Mangapiko Stream, as well as other lakes, rivers, streams, and scenic reserves.

Where Kirikiriroa Hamilton engagement event participants recorded locations and or made comments about these locations, these have been mapped and recorded in the WRC spatial system. Comments about these locations included the scenery that can be enjoyed, people's connection to areas close to home, and their connection because of activities they can partake in associated with the water in these areas. Where there may be concerns about the publication of particular locations of historic and cultural sensitivities this information about these sites will not be publicly available but will inform plan development.

Participants provided reasons and comments for why they may no longer use freshwater sites and places due to water quality, with responses ranging from those who felt water quality is good, to those who did not find it suitable swimming due to general poor water quality and E. coli levels and cyonobacteria in freshwater sites. These locations included Jones' Landing (on the Waikato River), Lake Ngāroto, Mangare Stream and the Waikato River.

3.8.4 Values and outcomes

The Kirikiriroa Hamilton participants assigned importance to all the four national compulsory values (Appendix 1A of the NPSFM) and noted aspects of these values that are important to them. In their responses, the participants commented on aspects of the values (Ecosystem health, Human contact, Threatened species and Mahinga kai). Their responses ranged from a focus on ecosystem health to the need to recognise the life-sustaining nature of freshwater. Some participants noted that providing for ecosystem health also allows the other values to be attained.

When asked what else the participants value about freshwater in the Kirikiriroa Hamilton FMU, the community identified aspects of other values that must be considered (Appendix 1B of the NPSFM) natural form and character, drinking water supply, transport and tauranga waka, commercial and industrial use, wai tapu, and hydro-electric power generation. There are a range of activities undertaken in the FMU and throughout the region, at sites that are special to the community, including swimming, fishing, and boating. Participants also identified amenity and recreation values for activities such as biking and tramping, activities that do not take place in water but occur adjacent to and alongside waterbodies.

3.8.5 Attributes and targets

A few Kirikiriroa Hamilton participants had concerns about the current state of waterways in their FMU. Comments included: concerns with cyanobacteria, associated toxins and algal blooms and effects. One participant commented on the toxic effects of algal blooms on birds and fish at Lake Ngaroto. Degradation of the Waikato riverbed through the city was a concern as well as pest weeds and rubbish in gullies and stormwater rubbish. Concerns as to whether the water was safe to swim in were expressed related to water quality and clarity with one participant commenting on sickness when swimming. Hamilton people not being engaged on the issues, lack of knowledge sharing between organisations and leadership from industry were also concerns. Other concerns included the need for more recognition of the impacts of diffuse discharges (as opposed to point source discharges), and focus needed on tributaries. Participants shared that making a project improvement in an area then ignoring and seeing retrograde was a concern and there was worry that Plan Change 1 would only see a 10% improvement rather than 20% improvement in the first phase.

In relation to what local freshwater state the Hamilton participants said they would like to achieve, there were comments about reducing sediment, aiming for a swimmable state within a reasonable timeframe (not 80 years), aiming for a healthy ecosystem (eradicating pest fish and weeds), healthy lakes (such as Lake Ngāroto), and a restored biodiversity corridor (in reference to the Mangapiko stream system). Other suggestions included intergenerational - continuous improvement and making 'public health warnings a thing of the past'. A 'realistic timeframe' was also suggested to achieve the desired state.

Aspects Kirikiriroa Hamilton participants would like to retain regarding the current state of the waterways included water clarity and water quality in the upper catchment including Taupō and places further south (Tongariro and Wanganui). There was mention of farmers' actions to protect waterways, the improving health of waterways and progress on Lake Taupō. Engagement, knowledge and education was improving, as well as being able to measure more precisely water quality and lake health trends including the publication and communication of this data was also mentioned. One participant also noted they were happy with the total resource currently being applied to water quality improvement.

In terms of the question about what water quality state should be aimed for, for lakes, event participants who responded chose the highest part of the scale to 'improve a lot' with one commenting that it depended on the water user and water body in question. The timeframe to achieve this was noted as soon as possible or soon. One other commented to support retaining the 20 percent improvement target for Plan Change 1.

In terms of the question about what water quality state should be aimed for, for rivers, there was one response to improve a little with a 50-year timeframe and other responses to 'improve a lot' as soon as possible.

3.8.6 Current actions and action plans

Current actions or activities described by Kirikiriroa Hamilton participants to improve freshwater included riparian planting, native planting, fencing, and retiring areas of land. Other current actions included involvement with catchment groups, working with farmers, and involvement in environmental community projects. Water testing, and water quality monitoring were mentioned as well as wastewater treatment and stormwater improvements. Participants also made reference to territorial authorities, integrated catchment management plans, additional rules in policies, multiple strategies, project plans, and priority setting, tightening of resource consent conditions, education and enforcement, and councils having a good relationship with public health.

There were a number of responses from Hamilton participants when asked what other actions could be done to improve freshwater. These included better and wider engagement with rural and urban communities, closer collaboration between regional and territorial authorities, education and communication, facilitating the coordination of volunteer groups, keeping up the momentum and having a better understanding of the issues and risks. Other suggestions included funding for planting, stormwater and litter control in gullies and streams, and community restoration and protection projects as well as increasing the number of environmental community projects. There were a few comments regarding offsetting, these included offsetting funds and coordination of efforts towards offsetting, setting up a biodiversity offsetting mechanism or biobanking specific to developers calculating compensation for adverse effects, and the ability for wastewater treatment plants to offset water impacts with remediation/ planting projects beyond their treatment process. Participants also suggested more research (e.g. tuna migration), continuous water quality monitoring, greater attention given to tributaries and establishing bottom lines noting a 'not one-size-fits-all' approach. One participant commented that the responsibility lay with the 'polluter' to pay and also suggested no 'grandparenting'. An integrated whole of catchment plan approach was suggested with key stakeholders involved in prioritisation and delivery (e.g. for greenhouse gas, climate, biodiversity, freshwater etc.). Other actions included: continuous capture of non-point source discharges and their impacts on water quality, consideration of lake nutrient versus river nutrient input and consideration at an FMU scale of the coastal receiving environment downstream effects as a result of Plan Change 1 and Plan Change 2.

3.8.7 Limits and rules

The Hamilton participants expressed a range of views on who and what activities need to be regulated to manage freshwater in the region. These surrounded comments on particular activities and made suggestions about the following activity types and management tools: farming land use change, discharges to water, the take and use of water, structures in waterways, earthworks, vegetation clearance and land disturbance, and wetlands.

Farm land use controls:

- In relation to land use controls, the participants suggested that intensification needs to be managed better and commented that the current rules are "not nimble enough to respond to climate change." Another comment was that there needs to be an

improvement in the framework because, “rules have locked out iwi from land use change.”

Take and use of water:

- The participants made general comments and suggested that there should be tools to enable water trading and more efficient use of water. Another participant suggested a transport and tradeable water allocation framework.

Earthworks, vegetation clearance and land disturbance:

- A participant commented that there should be a provision for “off-setting residual adverse effects greater than minimum or retain BSS provision for reasonable mixing downstream of point source discharge.” This was suggested to be put in place when this rule expires.

Discharges to water:

- Participants suggested that there should be a clear definition for “emergency discharges.” As well as this, there is the suggestion that there should be more constructive knowledge-sharing to get the right treatment solutions.

General comments were also made such as that the “plan is very dated – hard to use compared to other plans” and that the regional plan is based on data and not effective. Another participant commented that it is very confusing with the myriad of rules and policy.

Structures in waterways

A suggestion from a participant in relation to structures in waterways was to retain erosion protection rules.

3.8.8 Challenges, strengths and how to progress

The challenges seen by participants in Hamilton included the need to support knowledge sharing to reduce the fear of uncertainty. Sharing a vision and effectively engaging on this is seen as a challenge when there is currently little collaboration. Further challenges identified include the need to have skilled people involved in building capacity and capability, and working through the processes of planning and policy required by legislation which keeps changing.

There is recognition of many groups already working together, catchment groups and sector leadership in rural, iwi and business groups all contribute to building collaboration. The University of Waikato and students researching water quality issues are helping to build a greater awareness among young people. There is also growing awareness about what has started through the Vision and Strategy, which is seen as our biggest advantage and also through the strengths within the community as a result of the PC1 journey.

Actions identified by Kirikiriroa participants to be progressed now were to continue engaging with those not involved in PC1 to educate and grow the understanding of the issues and potential mitigations and continue with the good work already happening with Farm Environment Plans. Increased monitoring and science to document change that is taking place were also identified for action now.

3.9 Waikato-Waipā Freshwater Management Units – Tuakau community workshop

A total of 13 people attended the Tuakau community workshop. The attendees included community members, farmers and landowners, vegetable growers/horticulture, stakeholders, unitary authority staff, regional councillors and planning consultants.

3.9.1 Te Mana o te Wai

Participants at the Tuakau event thought that the practical importance of Te Mana o te Wai was about looking after freshwater and doing the right thing. This requires everybody to work to best practice and maintain integrity across the board, all working for improvement, incrementally over time. This applies not only to farmers and growers, but also to urban and development impacts (such as wastewater treatment). If drinking water is prioritised, there was a concern about the pressure on water supply for growing food. The effect of impending national drinking water standards was seen as potentially significant. It was noted that the first step to looking after water is to understand it, as a lack of knowledge of the system affects outcomes. This includes what runs over the land, through the land and under the land (including limestone tomos and underground water), and complex ecosystem interactions, for example in lakes like Whangapē. Participants saw that Te Mana o te Wai requires a holistic approach from mountains to sea, and also acknowledged the significance of the Waikato River from its headwaters to the ocean. They said that along the way, activities that rely on water (like farming and vegetable growing) are part of this holistic picture, and water storage should be included in the measures taken. Participants called for a balance that recognises people are using the water, and that the economy and human health are tied into these water uses. Plans need to recognise that water can't be 'locked up' but equally should leave a property in a state no worse than when it entered. At this end of the river, just before it reaches the sea, there was a question around the actual effect if a greater level of water takes were to be permitted. This community relies on water and takes pride in growing vegetables – providing 26% of national vegetable production, which they see as a significant contribution to food security and human health. The point was made that economic resilience enables investment for improvement. This investment then increases the pride of the community in its productive contribution, which enhances mana locally, and leads in a positively reinforcing circle to further investment and greater mana.

3.9.2 Long-term visions

Te Ture Whaimana o Te Awa o Waikato - the Vision and Strategy for the Waikato River was recognised by Tuakau participants as a document with legal standing, and overarching aspirations and objectives that people would not disagree with. It was recognised that differences of opinion might arise in its interpretation and implementation through policies and plans and determining how to measure and achieve health and wellbeing for the water.

The Tuakau participants vision statement below is based on Te Ture Whaimana, applying it to all freshwater resources.

"Our vision is for a future where freshwater resources are healthy, sustain abundant life and prosperous communities. We, in turn are all responsible for restoring and protecting the health and wellbeing of the freshwater resources and all they embrace, for future generations to come."

3.9.3 Special sites and features

Participants at the Tuakau engagement event identified a range of locations where they undertake freshwater recreation and or activities, special freshwater sites and features in the Tuakau catchment and broader Waikato Region. The freshwater locations included the Waikato River mouth, Lake Waikare, and Lake Whangapē as well as wetlands, rivers, streams a waterfall and an aquifer.

Where participants recorded locations and or made comments about these locations, these have been mapped and recorded in the WRC spatial system. Comments about these locations included their connection to the water through recreational activities and as a source of mahinga kai. Where there may be concerns about the publication of particular locations of historic and cultural sensitivities this information about these sites will not be publicly available but will inform plan development.

Participants provided reasons and comments for why they may no longer use freshwater sites and places due to water quality such as those who felt the freshwater in Lake Waikare has been impacted with agal blooms and koi carp.

3.9.4 Values and outcomes

The Tuakau participants assigned importance to all the four national compulsory values (Appendix 1A of the NPSFM) and noted what aspects of these values are important to them. In their responses, the participants commented on aspects of the values (Ecosystem health, Human contact, Threatened species and Mahinga kai). Their responses ranged from highlighting human contact such as having the ability to swim, boat and fish in freshwater, ecosystem health, protecting of threatened species, and mahinga kai and priority for food security in these areas.

When asked what else the participants value about freshwater in the Tuakau FMU, the community identified aspects of other values that must be considered (Appendix 1B of the NPSFM) such as natural form and character and fishing. There are a range of activities undertaken in the FMU and throughout the Waikato region, at sites the community considers to be special, with participants noting swimming, fishing and boating. Participants also identified amenity and recreation values for activities such as bird watching.

3.9.5 Attributes and targets

A few Tuakau participants have concerns about the current state of waterways in their region. Some of the concerns raised by participants about the current state of waterways in Tuakau included: the effects urban stormwater has on streams, urbanisation or rural areas creating an increase in sediment, algae build-up, and quick build urban areas overflow to streams.

One participant made mention of a large improvement in stock exclusion and the work that individuals do such as planting and fencing.

Participants commented that improvements to the state of waterways should be achieved in a timeframe that, “ensures sustainable, resilient communities.”

In terms of the question about what water quality state should be aimed for, there was one response to ‘improve a little’ in 5 years, ‘improve a little more’ in 20 years, and ‘improve a lot’ in 80 years.

3.9.6 Current actions and action plans

When asked what actions are already being done to improve freshwater in the region, Tuakau participants mentioned stock exclusion regulations, care groups doing pest management, planting which encourages bird life, Landcare groups, wetland restoration, planting and fencing, and waterway protection funding.

Participants said that other actions can be done to improve the freshwater and made comments such as requiring money to support monitoring and resources, “FEPs [Farm Environment Plans] and accountability with these,” connecting closer with contractors, webinars to share information in an informative way, more action around DNA testing for E. coli, more planting and wetland protection, stormwater management and options for control and improvement, and treatment of urban run-off.

3.9.7 Limits and rules

There was a range of views expressed by Tuakau respondents on who and what activities need to be regulated to manage freshwater in the region. These surrounded comments on particular activities and made suggestions about the following activity types and management tools: structures in waterways, earthworks, vegetation clearance and land disturbance, wetlands, and stormwater.

Structures in waterways:

- Participants made general comments in relation to structures in waterways and suggested minimising downstream impact when inadequate culverts are put in upstream.

Earthworks, vegetation clearance and land disturbance:

- One participant suggested education packages for digger registrations.

Wetlands:

- Comments were general and included the suggestion for clarity regarding the wetland definition as this is important for landowners.

Stormwater:

- A participant suggested considering effects on waterways with stormwater consenting.

General comments were also made surrounding the current rules. Some participants commented that "Rules overrule rules etc. becomes confusing. Needs more clarity." Other participants called for clarity with definitions, realistic targets and sensible, practical, and achievable rules.

3.9.8 Challenges, strengths and how to progress

In Tuakau, the key challenge is seen to be based on economic, or financial constraints in addressing pollution and responding to conflicting legislation. The task ahead appears to be unmanageable within the expected timeframe and will require alignment of government and council direction and involve the whole community.

Strengths working in their favour noted by participants were a growing understanding of the need for environmental change based on good science and seeing the experiences of other regions.

Letting people know the timeframe will assist in building trust and good relationships between the Council and landowners. Communicating the science to justify the change will assist the community to focus on getting things done, especially those supporting Landcare and catchment groups.

3.10 Waikato-Waipā Freshwater Management Unit – online and written feedback

There were 14 respondents from the Waikato-Waipā FMU that provided online feedback via EngagementHQ and two who provided written email feedback as reported below. Online respondent occupations included a farmer, a retired farmer, retired, biologist, doctor, hydraulic engineer, business manager, two self-employed, and a technician. Two online respondents provided no occupation details and another noted 'refrigeration' as their occupation. Two respondents who provided written email feedback identified as vegetable growers.

3.10.1 Special sites and features

Online feedback for the Waikato and Waipā FMU mentioned a range of recreational activities including fishing, hunting, swimming, boating, and water sports undertaken throughout the FMU and more broadly. Other activities included use for food production. The freshwater locations included Whangamarino wetland, Pirongia streams and rivers, the Waikato and Waipā river and its tributaries, as well as other rivers, streams and wetlands.

3.10.2 Values and outcomes

Most respondents who provided online feedback for the Waikato-Waipā FMU expressed importance for all four national compulsory values (Appendix 1A of the NPSFM).

Other values were identified as important (i.e. other values that councils must consider - Appendix 1B of the NPSFM) particularly for the Waikato and Waipā River and tributaries, Tangirau wetland, Lake Waikare, Puniu stream / Mangatutu stream, Ngakoaohia stream, Lake Waipāpa, Lake Arapuni, west to Pirongia and further east to Waimakariri stream and Waihou river. The other values mentioned by respondents included natural form and character, drinking water supply and animal drinking water, wai tapu, transport and tauranga waka, fishing, hydro-electric power generation, irrigation, cultivation and production of food and beverages and commercial and industrial use.

3.10.3 Attributes and targets

The main concern about the current state of waterways expressed by online respondents for the Waikato-Waipā FMU was they felt that not enough had been done to halt degradation of the waterways. There were comments about the negative impacts of all land use (farming, forestry, urban settlement, industry, stormwater management, wastewater management), overuse of the water resource (e.g Auckland water supply and irrigation) and the timeframes and cost to improve water quality. There were other concerns about pollution. Online respondents were also concerned with the lack of riparian planting and fencing, management of land use (especially farming), farm intensification and that WRC needed to do more to improve the health of the waterways. One other online participant mentioned destructive straightening (of waterways), tree removal and scorched earth digger work as still common on rivers such as the Waipā river. Sites of concern mentioned included: Lake Waikare, Whangamārino wetland, Puniu stream, Mangatutu stream, Waipā river, and all rivers in the Waikato-Waipā FMU.

Online responses to what they would want the waterways to look like in their area in 10 years' time included cleaner water, swimmable, drinkable, less polluted, less contaminant loss, easier access, less extraction of water, weed and pest free, minimum of 2 metre water clarity and lower levels of nitrogen (below .08 mg/l), to be as pristine as possible and without any further decline. One other commented that it was important to have the ability to access this natural resource for vegetable production. Online responses to how they would like to see the waterways longer term included: access to mahinga kai, Te Mana o te Wai, improvement in freshwater species, less pest species, a safe habitat for wetland birds to thrive, to be full of wildlife, cleaner waterways and more wetlands, clean enough to swim in and drink (over 50%), and minimum of 2 metre water clarity and lower levels of nitrogen (below .08 mg/l). Other comments for the waterways included: to be as they were 100 years ago, be pristine as possible, and the ability to maintain and improve water quality for current and future generations. One other respondent mentioned the protection of water rights for the future (increased water take in case of drought periods to maintain crop survival). In respect of timeframes to achieve a desired state longer term, the range of online feedback included anywhere from as soon as possible, to 40-50 years.

Online respondents mentioned aspects they were both happy and unhappy about the current state of the waterways. There were comments about being happy with waterway access and access to fishing, that there were healthy fish populations, that riparian planting and fencing had been done and was continuing, that illegal grazing had been sorted (on upper Mangatutu above Wharepuhunga road), farm planning and that there were some rules in place. Other participants when asked the question about current state responded no, nothing, not much with one other commenting that 'there is too much contaminant loss from intensified farming above levels that can be attenuated. All farms at the individual farm property level must be limited in intensity not exceeding natural capacity to attenuate contaminant loss so not to cause issues in downstream receiving environments and that there can be no overall unders and overs approach'.

3.10.4 Current actions and action plans

Current actions or activities described by respondents for the Waikato and Waipā FMU included fencing, riparian planting, stock exclusion and wetland restoration. Other actions included sediment controls in ponds, allotted water take, monitored water usage, and the prosecution of offenders. One other commented that more needs to be done, suggesting the farming industry pay for restoration ('polluter pays').

Other actions mentioned by Waikato – Waipa FMU online respondents to improve freshwater included putting in place clear bottom lines for nitrogen (e.g. DIN), more monitoring, more regenerative agriculture, more action to put in place better management practices, more education (including an educational partnership between councils and River Schools/Kura Waitii), eradication of pest plants and fish, and more funding. A participant mentioned a whole of sub-catchment approach be undertaken getting more landowners to do more work to protect and restore freshwater, and another suggestion was for urban and rural residential areas to be made more accountable for stormwater contributions and made to offset. Another suggested raising Lake Waikare back to 6.07 metres allowing the Waikato to flow into and out of the lake, and raising the Whangamārino weir to 3.4 metres. Other suggestions included banning synthetic fertiliser, a cap on stock units per hectare (dependent on land class) or a resource consent (not an industry based farm plan), and a focus on sediment from grazing, cropping and forestry.

3.10.5 Limits and rules

Waikato – Waipa FMU online participants suggested additional rules they thought would improve the state of freshwater in their area. These included: realistic buffer rules based on land use and slope with maximum slope restrictions, reduced fertiliser use, upper bounds on acceptable nitrogen loss (which will differ on catchment and FMU), no sewage discharge to waterways (treated or not), fencing of all waterways, and silt traps on point source discharges via drains. There were also comments about more guidance or accords with industry to better manage, utilising catchment plans and farm plans, and tailoring management and practices to each individual farm. Online participants also mentioned fines for excessive soil damage (pugging) and that the rules needed more 'teeth'. A participant commented that 'the polluter pays principle must be upheld' and to 'not impose offset regimes on those who already farm without breach of ecosystem health limits'.

3.11 Hauraki Freshwater Management Unit – Paeroa community workshop

A total of 20 people attended the Paeroa community water workshop. The attendees included community members, farmers, landowners, iwi/hapu, stakeholders, agency staff, and district and regional councillors.

3.11.1 Te Mana o te Wai

In Paeroa, general concepts about mana were seen by Paeroa participants to apply also to wai. Water has wairua, and is a living being. Therefore, we should treat our waterways with dignity and respect, as a living thing, and that should guide us in what we want to achieve. Mana was interpreted as upholding the 'clean' of the water, and the link was made to our human bodies being 70% water. The journey of water was acknowledged as it passes through land and those who work it – all have mana. It was observed that the issue is not in the water – it does not sit with Ranginui; rather, it is Papatūānuku who is affected through our land use. Consequently, the suggestion was made to focus and expand on soil indicators to ensure wellbeing. For those present, it was a 'given' that good, healthy water is important – but a policy framework is needed to help people for whom this is not a given yet. Good, healthy water is not, however, clearly defined, and clarity of measures, standards and mitigation strategies is needed to operationalise Te Mana o te Wai. Quality guidelines and mitigation strategies should be evidence-based, and local information about waterways needs to be taken out to local communities. Progress has

been made from the past situation where the Ohinemuri was called a 'sludge canal' for mining and sewage – however reticulated systems are still sending elements out to the Tikapa Moana (Hauraki Gulf). Communities and kaitiaki can express Te Mana o te Wai directly through on-the-ground action like planting natives, leveraged by accessing funds. Residents can also be advocates for water and for local community values and sites like swimming areas. The advice was given by one participant that if you are going to be politically active in your community and take on the issues in court, make sure you have solid data, and take along your hinaki (eel trap) to help get your point across.

A strong argument was put forward by participants for local ownership and responsibility, with governance to sit with local Freshwater Management Unit communities familiar with the unique characteristics of their area (not a one-size-fits-all approach). The suggestion was that these should operate as a whānau of FMU members including individuals, landowners and industries, all responsible and with equitable compliance applied to all. A reality check was called for in terms of asking what is the natural state here in this FMU - can local waterways meet national bottom lines? The point was made that aspirations need to be pursued with balance and tempered with an understanding of the cost to achieve them.

3.11.2 Long-term visions

Support was expressed by Paeroa participants for adopting the same objectives as Te Ture Whaimana o Te Awa o Waikato - the Vision and Strategy for the Waikato River to save on consultation time and move directly to action and outcomes.

The vision statements Paeroa participants created were as follows:

"All community members are taking action to restore and protect the health and wellbeing of our waterways"

"Communities (Hauraki/ Waikato) reconnecting to their Rivers to restore the quality and values that support resilience, use and recreation"

"Our waterways are able to support activities, biodiversity and characteristics desired by the community"

Participants noted that the above were to be measured by assessing the health of the waterways, must be affordable and sustainable and must take into account natural characteristics – tidal, sediment. There was also discussion about determining what could realistically be achieved in 10 years. It was noted that within 10 years efforts could focus on protection and information gathering, with restoration as a 20 year focus. Community input and establishing FMU whānau/community groups to prioritise restoration was also suggested.

3.11.3 Special sites and features

Participants at the Paeroa engagement event identified a range of locations where they undertake freshwater recreation and or activities, special freshwater sites and features in the Paeroa catchment and broader Waikato Region. The freshwater locations included the Waihou River, Ohinemuri River, Waitoa River and Lake Taupō as well as other rivers and streams.

Where Paeroa participants recorded locations and or made comments about these locations, these have been mapped and recorded in the WRC spatial system. Comments about these locations included the connection people felt to these locations (such as ones close to where they live) and that being able to utilise these areas is valued by the community. Where there may be concerns about the publication of particular locations of historic and cultural sensitivities this information about these sites will not be publicly available but will inform plan development.

Participants provided reasons and comments for why they may no longer use freshwater sites and places due to water quality, with responses ranging from those who thought the water quality was good and "close to their natural state," to those who commented that they would not swim in some of their local rivers due to general poor quality and negative consequences that some have experienced from toxic water when swimming in waterways such as "vomiting, headaches… skin irritation." Locations stated include Waihou River and Piako River.

3.11.4 Values and outcomes

The Paeroa participants assigned importance to all the four national compulsory values (Appendix 1A of the NPSFM) and noted what aspects of these values are important to them. In their responses, the participants commented on aspects of the values (Ecosystem health, Human contact, Threatened species and Mahinga kai). Their responses ranged from a focus on overall ecosystem health, safe food harvesting and production, and interaction with the water for recreational purposes. One participant noted that none of the four national values were directly related to economic aspects of water.

When asked what else the participants value about freshwater in the Paeroa FMU, the community identified aspects of other values that must be considered (Appendix 1B of the NPSFM) such as natural form and character, drinking water supply, animal drinking water, fishing, and hydro-electric power generation. There are a range of activities undertaken in the FMU and throughout the region, at sites special to the community with many participants noting swimming, fishing, and boating. Participants also identified amenity and recreation values for activities on land such as walking.

3.11.5 Attributes and targets

A few Paeroa event participants have concerns about the current state of waterways in their FMU. Some of the concerns raised included: sediment increase, dirty rivers, the impact of koi carp, general decline in water quality, higher turbidity, a lack of planting, "land leaking too much nutrient," and gravel build-up. Locations for these concerns included: Thames, Waihou and Piako rivers, Kauaeranga river, and the Mangawhero stream.

In relation to what local freshwater state they would like to achieve, one Paeroa event participant stated they would like local freshwater to achieve a state where it is survivable to native taonga. Another participant commented that they would like to see the water quality drinkable. Finally, participants mentioned that they would like to achieve "pristine functioning ecosystems," and see incremental improvements continuously as well as a state that allows and promotes appropriate life in the waterways.

Generally, the event participants' comments suggest there are aspects that they are happy about with regard to the current state of the waterways in Paeroa, making note of the continued water supply, the industrial monitoring of waste discharge into waterways, the temperature of discharge, clarity of water and filtering of discharge. One participant commented that they felt the Kauaeranga river was generally healthy, and they were happy with this.

3.11.6 Current actions and action plans

When asked what actions are already being done to improve freshwater in the region, Paeroa participants mentioned fencing for stock exclusion, upgrading Paeroa Wastewater Treatment Plant, catchment monitoring (water and biodiversity), restorative planting, farm environment plans, and managed wetlands. One participant also mentioned how the current regulations are already improving freshwater in the region.

Paeroa participants discussed other actions that can be done to improve freshwater and made comments such as the idea of "16 element soil measures incorporated or recommended", supporting partnerships with landowners and catchment groups, accurate cost/benefit analysis of mitigations to assist with better decision making, accurate identification of point source of

issue for the most effective action, eDNA monitoring, engaging schools, continuing and encouraging riparian planting, creating more wetlands (if they can be managed effectively), greater use of borrow pits, restarting silt trap cleaning, and establishing individual catchment benchmarks for individual outcomes.

3.11.7 Limits and rules

There was a range of views expressed by Paeroa participants on who and what activities need to be regulated to manage freshwater in the region. Views ranged from those who felt the current rules were poor, to those who felt they were effective. Comments were made on particular activities and participants made suggestions about the following activity types and management tools: discharges to water, farming land use change, farm plans riparian management, and stock exclusion from waterways.

Discharges to water:

- Comments suggested that there should be a review for all discharge consents of who, what, where, and an alternative.

Farm land use controls:

- Suggestions included the measuring of individual farms and measuring soil carbon, and comments about what should be put in place when this rule expires included strict land use change regulations. A final suggestion included finding a profitable farming system that improves water outcomes.

Riparian management:

- A suggestion was made for riparian management that stated there should be a review for all riparian use (Government, Council, Land user) and question if it is appropriate for use.

Stock exclusion from waterways:

- Comments suggested that there was the consideration that stock exclusion was effective. Yet, suggestions included the idea that it needed to be risk-based and questioned how to address smaller streams.

Farm plans:

- Comments suggested the need for farm plans to be rolled out and tailored to each specific catchment.

General comments were also made surrounding the current rules. These comments said the rules were not effective and that greater education is required. Another comment stated that they felt written plans achieve very little as they cannot be measured for change over time.

3.11.8 Challenges, strengths and how to progress

The participants identified the biggest challenges facing the community in Paeroa are the time constraints and costs of understanding the science related to the source of the problem, i.e. cause and effect, and education to fill the gaps in knowledge. The science and education related to Te Mana o te Wai, soil measures, water measures and native biodiversity were noted. There is a sense of urgency and recognition that the cost of mitigation is not well understood.

The strengths noted by the Paeroa participants are economic stability and people who are local champions, showing leadership within a community that holds the values of caring for the land, caring for the water, and doing the right thing. The sense of high levels of awareness, good communication and connections supports this community to work in collaboration. This also includes a need for understanding Mātauranga and sharing that knowledge.

The progress that can be undertaken now is to build on existing strengths, connect the network of existing groups and empower local initiatives. Adopting Waikato River objectives outlined in Te Ture Whaimana and including young people in schools will support a focus on building resource capability in terms of people and funding.

3.12 Hauraki Freshwater Management Unit – online feedback

Two respondents from the Hauraki FMU provided online feedback via EngagementHQ as reported below. The respondents' occupations were listed as farmer and student.

3.12.1 Special sites and features

Online feedback for the Hauraki FMU referred to the recreational activities of swimming and fishing as well as using water for growing food (at a household scale). One respondent referred to dairy farming as an activity they do on or in freshwater bodies. Freshwater locations included Tahuna and Waiwhakaurunga (aka Kauaeranga).

3.12.2 Values and outcomes

For those two respondents who provided online feedback for the Hauraki FMU, they assigned importance to the four national compulsory values (Appendix 1A of the NPSFM).

Other values were identified by the two respondents as important (i.e. other values that councils must consider - Appendix 1B of the NPSFM) particularly for Piako river and tributaries, Waiwhakaurunga (aka Kauaeranga) and Waihou-Piako. The other values mentioned by respondents included natural form and character, drinking water supply and animal drinking water, wai tapu, transport and tauranga waka, fishing, irrigation, cultivation and production of food and beverages.

3.12.3 Attributes and targets

The two Hauraki online responses had quite different concerns. One participant was concerned with the rules, rate of change expected and burden on the rural community stating all ratepayers have a responsibility for water quality. In contrast, the other participant was concerned with "farming practices and land use destroying the capacity of water bodies to be thriving ecosystems." This participant also raised concern about the Waihou and Piako rivers transporting contamination into Tikapa Moana, noting that cleaning the rivers would also contribute to cleaning Tikapa. This respondent identified sites of particular concern including Piako river and tributaries, Waiwhakaurunga (aka Kauaeranga) and Waihou-Piako.

Online responses to what they would want the waterways to look like in their area in 10 years' time included a gradual improvement in water quality realising any changes take time to filter through the ground water system, more public access (less restricted access due to private land), back to pre-colonisation levels of nutrient and pathogens levels of contamination and appropriate types of emerging forest around all water bodies. Online responses to how they would like to see the waterways longer term included an improvement in water quality and full public access, back to pre-colonisation levels of nutrient and pathogens levels of contamination, and appropriate types of developed forest around all water bodies and covering catchments. In respect of timeframes to achieve a desired state longer term, the range was between 30-49 years.

One online respondent regarding the management of freshwater was happy with the current rules with the belief that the biggest proportion of communities are improving water quality, when financially able. The other participant was happy with the current clean state of Waiwhakaurunga (aka Kauaeranga).

3.12.4 Current actions and action plans

Current actions mentioned by online respondents included: stock reductions, reductions in nitrogen application outside of cropping and voluntary farm environment plans.

Further online feedback on the Hauraki FMU from the two respondents on further actions included help fund individual farms with riparian planting for wider buffer margins (if farmers agreeable) as some farms have long tributaries running through them and restoring the Hauraki Plains to a pre-colonisation ecosystem through: buying back lands, transferring lands to mana whenua, prohibiting intensive grazing and dairy, reducing the population in flood areas, and filling in all drains.

3.12.5 Limits and rules

The two who responded online from the Hauraki FMU had different ideas surrounding the rules. One thought the current rules were sufficient and just needed to give people time to action, while the other respondent suggested rules to control and eliminate applications of synthetic nitrogen over 10 years, enforced farm management plans on all farms over 5 hectares and changing land use through farm management plans to restore native ecosystems.

3.13 Coromandel Freshwater Management Unit – Whitianga community workshop

A total of 13 people attended the Whitianga all day community workshop. The attendees included farmers and landowners, members of community groups, stakeholders, an ecologist, district council staff, and regional councillors.

3.13.1 Te Mana o te Wai

Te Mana o te Wai was acknowledged by attendees in Whitianga as a concept from Te Ao Māori that needs to be respected and understood. Te Mana o te Wai is paramount because water is a necessity of life. As such, water should not be seen as a commodity that belongs to anybody or has a price, but rather as an entity of itself. It is connected to everything and connects everything. Mana is a holistic perspective on protecting taonga, which will then look after us. The state of hauora (broader wellbeing) will come about if the life force is strong in people, community and the river.

3.13.2 Long-term visions

Participants at the Whitianga event created the following vision statement:

“Freshwater is a healthy essence of life – for all species and for future generations: secure supply, drinkable, swimmable, food can be sustainably harvested”

“Achieved by engaging people in:

- Creation of healthier waterways
- Enough community education, volunteer riparian planting, water quality monitoring and regulation to create a healthier population
- The health of water and ourselves are a reflection of each other. Make it a priority!”

3.13.3 Special sites and features

Participants at the Whitianga engagement event identified a range of locations where they undertake freshwater recreation and or activities, special freshwater sites and features in the Whitianga catchment and broader Waikato Region. The freshwater locations included Grahams Creek, Tairua River, Piako River, Kauaeranga River, and other rivers, streams and estuaries.

Where participants recorded locations and or made comments about these locations, these have been mapped and recorded in the WRC spatial system. Comments about these locations included the connection people felt to these locations. Where there may be concerns about the publication of particular locations of historic and cultural sensitivities this information about these sites will not be publicly available but will inform plan development.

3.13.4 Values and outcomes

The Whitianga participants assigned importance to all the four national compulsory values (Appendix 1A of the NPSFM) and noted what aspects of these values are important to them. In their responses, the participants commented on aspects of the values (Ecosystem health, Human contact, Threatened species and Mahinga kai). Their responses ranged from a focus on water quality to their own connections to the water, such as swimming.

When asked what else the participants value about freshwater in the Whitianga FMU, the community identified aspects of other values that must be considered (Appendix 1B of the NPSFM) such as natural form and character, and drinking water supply. There are a range of activities undertaken in the region, at special sites for the community with some participants noting swimming, fishing, and kayaking. Participants also identified amenity and recreation values for activities such as biking and walking, activities that do not take place in water.

3.13.5 Attributes and targets

A few Whitianga participants have concerns about the current state of waterways in their region. Some of the concerns raised by participants about the current state of waterways in Whitianga included bovine E. coli after heavy rainfall, a lack of monitoring, sedimentation associated with forestry in particular, the declining water quality in general.

In relation to what freshwater state they would like local freshwater to achieve, comments generally focussed on wishing for water to be swimmable, and a healthier environment for species such as fish. One participant commented that they would like to achieve a state where the water quality can be used by households.

Generally, the Whitianga participants comments suggest there are some aspects they are happy with regarding the current state of waterways in Whitianga, making note of Egan's Park and the 309 river. Another participant mentioned that they were happy with the natural stream margins.

In terms of the question about what water quality state should be aimed for, the 2-3 attendees who responded chose 'improve a lot'. One participant noted 'improving a lot' particularly in relation to reducing pollution from fertiliser run-off and E.coli. One other also commented about reducing bovine E.coli in receiving environments downstream such as Graham's Creek. They also mentioned riparian planting on the other side of Graham's Creek within 2 years.

3.13.6 Current actions and action plans

When asked what actions are already being done to improve freshwater in the region, Whitianga participants mentioned the involvement of local community groups, protection in farms to improve water quality (particularly in Tairua), riparian planting and fencing by landowners, assisting local farmers with exploring alternative options to synthetic fertilisers, and using more environmentally friendly household products to minimise environmental impacts.

Participants said that other actions can be done to improve the freshwater and made comments such as figuring out a baseline so that planning resources to maintain the current baseline in the future can occur, increasing community communication, reinstating catchment committees, general comments about improving monitoring availability and information, improving permanent forest cover on steep land, and the improvement of felling/ planting rules for forests.

3.13.7 Limits and rules

There was a range of views expressed by Whitianga participants on who and what activities need to be regulated to manage freshwater in the region. They made suggestions about the following activity types and management tools: discharges to water, take and use of water, stock holding and effluent management, earthworks, vegetation clearance and land disturbance, agrichemicals, fertiliser use, farm plans, farming land use change, stock exclusion from waterways, and wetlands.

Discharges to water:

- Regarding discharges to water, a suggestion was made by a participant that contaminants include weedkiller and pesticides.

Take and use of water:

- Comments were general and included suggestions such as the idea that freshwater take should include consent and monitoring requirements. As well as this, a suggestion of changing new building consents to include roof drainage and roof water tanks was also mentioned. A final suggestion included the idea to prioritise bacterial content of concrete/plastic roof-water water tanks, and to educate the community of its safety.

Stock holding and effluent management:

- One participant mentioned the Tairua effluent control "using latest technology and storage consents" as a suggestion.

Stock exclusion from waterways:

- One participant mentioned that "'wide rivers' should be smaller rivers if drain into wetlands or harbours and include ditches."

Earthworks, vegetation clearance and land disturbance:

- Comments included the statement that the problem is forestry on steep areas. There is also the suggestion of community education on the mercury levels in fish growing in the water catchment.

Wetlands:

- Comments stated that wetlands should be priorities and suggested that more protection is needed.

Farm plans:

- Participants considered farm plans effective and that the community should have farm plans, and for it to be a "whole of region approach". One participant suggested that farm plans should include rotation, numbers of stock, and retiring areas – with funding. Finally, a participant commented that the Tairua farm environment plans need completion ASAP and to implement these.

Farm land use controls:

- Comments were general and included a suggestion that intensification rules should include stock numbers.

Fertiliser use:

- Participants stated that there was a lack of fencing around waterways, as well as extensive use of synthetic fertilisers, pesticides and sprays. A suggestion included encouraging the use of organic fertilisers and nitrogen fixing plants and aim to phase out artificial nitrogen.

Agrichemicals:

- There was one comment surrounding agrichemicals which was to identify and not use weedkiller that is antibiotic resistant.

General comments were also made surrounding the current rules. These comments included that current rules are not being acted on and water pollution is increasing. Therefore, there is a need to enforce rules. Another comment was a participant stating, "avoid blanket rules – identify individual catchment-by-catchment basis."

3.13.8 Challenges, strengths and how to progress

Whitianga attendees reported the biggest challenges to achieving the freshwater vision would be funding, while addressing competing priorities and political bias. The dual challenge of protecting the environment while building the economy will require everyone to work together to get the buy-in from communities and individuals.

The strengths in the community are the high ecological values of the Coromandel Peninsula, including the marine reserves, large conservation estate, QEII covenants and bushland. The participants can see an opportunity to preserve, maintain and improve these features in order to showcase the Coromandel and funnel dollars from tourism into the protection of freshwater.

Creating a shared vision and connecting the communities with a common purpose will be the focus for this community. Education for contractors and communities in relation to managing rubbish, reducing pesticides and chemicals around waterways and targeting sediment were identified as key issues.

3.14 Coromandel Freshwater Management Unit – online feedback

Two respondents from the Coromandel FMU provided online feedback via EngagementHQ as reported below. The respondents' occupations were listed as employment consultant and counsellor.

3.14.1 Special sites and features

Online feedback for the Coromandel FMU referred to the recreational activities of swimming and duck shooting as well as gathering food. Freshwater locations included Kaueranga River, Tapu River, Piako river, Waihou River as well as all rivers and the sea.

3.14.2 Values and outcomes

For those two respondents who provided online feedback for the Coromandel FMU, they assigned importance to the four national compulsory values (Appendix 1A of the NPSFM).

Other values were identified by the two respondents as important (i.e. other values that councils must consider - Appendix 1B of the NPSFM) particularly for Kauaeranga River, Coromandel rivers from Thames north to Port Charles and Fletcher Bay, the Firth of Thames, Tikapa Moana, and all rivers and the sea. The other values mentioned by respondents included natural form and character, drinking water supply and animal drinking water, wai tapu, fishing, irrigation, cultivation and production of food and beverages.

3.14.3 Attributes and targets

Online respondents for the Coromandel FMU were concerned about forestry pollution in Coromandel waterways, particularly where forestry was planted within 100 metres of waterways and having no fishery officers or anyone monitoring the waterways in the Firth of Thames.

Online responses to what they would want the waterways to look like in their area in 10 years' time included no cow or forestry pollution. Waterways with a 100-metre riparian strip of native flora, and clean and safe water for all to swim in. Online responses to how they would like to see the waterways longer term included clean, safe and aesthetically pleasing waterways with real ribbons of native bird and insect life. In respect of timeframes to achieve a desired state longer term, the preference was as soon as possible or within a maximum of 3 years.

One online participant was happy with the management of freshwater with no cow pollution in the Kauaeranga or Tapu rivers, but feared forestry pollution. The other online participant was not happy with mussel farms polluting the Firth of Thames or fishing boats discharging effluent.

3.14.4 Current actions and action plans

One online participant commented on the green corridor scheme on the Hauraki Plains as well as other smaller local schemes happening. The other online participant however, made the comment 'none' when asked what activities they knew of currently being done to manage freshwater in their area.

One online participant suggested further action would be to have no effluent or sewage discharge into or near waterways and to reduce weed killer sprays.

3.14.5 Limits and rules

The two who responded online from the Coromandel FMU suggested additional forestry rules requiring native riparian planting to manage their runoff when harvesting. They also suggested the 'no use' of soaps or chemicals in or near waterways, suggesting changes needed to happen urgently.

4 Results – Matamata workshop

The two hour workshop in Matamata arose from interest following stakeholder liaison. A total of 18 people attended the Matamata session. The attendees included farmers and landowners, regional councillor/s and community members.

Following a presentation on the Freshwater Policy Review the attendees participated in a workshop where feedback was sought around the Hauraki or regional map regarding freshwater sites and features and activities. Questions were also asked about the challenges they faced, work they are doing to halt degradation and improve freshwater, feedback on how WRC should halt degradation and improve water quality through WRC planning documents, and what can be progressed now.

4.1.1 Special sites and features

Participants at the Matamata engagement event identified a range of locations where they undertake freshwater recreation and or activities, special freshwater sites and features in the Matamata catchment and broader Waikato Region. The freshwater locations included the Waitoa River, Wairere Falls, and Blue Springs, as well as other rivers, streams, springs, wetlands and features such as the Kopuatai peat dome and waterfalls. They also identified sites further afield including Cape Colville and the Firth of Thames and Otahu River in Whangamata.

Where participants recorded locations and or made comments about these locations, these have been mapped and recorded in the WRC spatial system. Comments about these locations included their connection to the water through recreational activities. Where there may be concerns about the publication of particular locations of historic and cultural sensitivities this information about these sites will not be publicly available but will inform plan development.

4.1.2 Challenges, actions, solutions and how to progress

Participants in Matamata acknowledged the competing interests held by people with differing views as one of the greatest challenges they face. This was described as balancing aspirations with realism, or ideology versus practicality. There are also population pressures and development of growing urban areas that impact on freshwater management. Raising awareness through education for the urban population was a key concern. Resource challenges identified include costs involved, the need for qualified consultants and time constraints to gather scientific evidence. Climate change effects and an overload of legislation were also noted.

Participants noted that a lot of initiative has already been shown in actions being undertaken to halt degradation and improve freshwater. These include the Clean Streams accord, streams being fenced, quarries moved to more suitable locations, Farm Environment Plans informing tailored fertiliser plans, soil testing and stocking rate reduction. Farmers are open to change and report being cognisant of all the different things that can be done, mentioning the use of water timers and valuing water more, undertaking a yearly organic audit, pest management and stock exclusion to prevent pugging.

Solutions proposed for further action should be taken at a catchment level, with catchment sub-groups making decisions on the ground. Local leadership working with groups of stakeholders with expertise and knowledge on the issues of freshwater management and managed retreat is required as this must be practical and relevant to the area. It was stressed that small stakeholder groups should bring iwi, farmers, and community together in the spirit of collaboration.

Steps suggested to progress these suggestions now included the need to recognise what can be done through a shared vision and educate end users on good practice by providing advocacy and not alienating stakeholders that have already invested in the required changes. Continuing emphasis on Farm Environment Plans will require increased support, planning and education of the new generations to better understand the current state and celebrate the wins.

5 Results – Stakeholder engagement

5.1 Primary sector

5.1.1 Arable sector

5.1.1.1 Arable sector group – workshop/meeting

A total of 11 people attended the Arable Sector Group meeting. The attendees included staff from a range of agencies including Farmlands, Ravensdown, Genetic, FAR, Agresearch, Federated Farmers, Agricom seeds, PGG Wrightson, Department of Conservation and others. The Arable Sector Group received a presentation on the Freshwater Policy Review followed by a workshop asking their feedback on four areas of freshwater management. These areas included feedback on their priorities, the challenges facing their sector, work they are doing to halt degradation and improve freshwater, and ideas on how WRC should halt degradation and improve water quality through WRC planning documents.

The Arable Sector Group identified a range of sector priorities for freshwater management. There were mentions of eliminating or preventing sediment runoff, eliminating nitrates, and providing more education regarding freshwater management. In thinking about future planning, future proofing climate change was mentioned as a market opportunity to diversify. Comments about having to contend with population growth and demand and the rural versus urban divide were also made as well as prioritising geographical and land use relevance. Clarity was sought and a general common understanding between council, industry and the government

surrounding the rules and regulations. Access to freshwater for use, and better water management were priorities now and for future use.

The group also identified various challenges in regard to freshwater. One of the challenges was uncertainty surrounding regulation with comments about rule clarity for sector understanding and knowing what other regulations they need to adhere to. The costs to the sector were identified as a challenge such as the impact of regulation on profitability, costs of compliance, and inflation. More funding, resourcing and support was sought. Access to and allocation of freshwater was also mentioned. Other challenges included sharing knowledge, combatting misinformation and applying research on farm and labour shortages. There were also comments about transitioning farming practices and "land use change/competition".

The arable sector noted some of the work they are doing to halt degradation and improve freshwater including a number of mentions of how together with utilising research and technology and best practice principles these were being applied. Research and technology included the use of Overseer, Precision Ag, FarmIQ (farm management software), and research and development involving plant breeding. The application of best practice principles included tillage management, riparian management, crop selection, use of nutrient budgets, best management, effluent management and changing cultivation techniques. Other work to halt degradation included education and sharing information within discussion groups.

A few ideas were shared on how we should halt degradation and improve water quality through planning documents. There were mentions of simplifying the rules so they were clear and easy to follow and providing facilitated education regarding the NPSFM. There were comments about removing or not having 'grandparenting' in planning documents. Other ideas included having a more positive approach such as showcasing case studies and good news stories and focusing on incentives rather than punishment. Other ideas included restricting urban growth, restricting glyphosate herbicide and carbon farming and having more dams and more trees for water management.

5.1.2 Dairy sector

5.1.2.1 Dairy Sector Group – workshop/meeting

Sixteen people attended the Dairy Sector Group meeting, including staff from factories, dairy manufacturing, DairyNZ, Federated Farmers and WSP. The Dairy Sector Group received a presentation on the Freshwater Policy Review followed by a workshop asking their feedback on four areas of freshwater management. These areas included 1) feedback on their priorities, 2) the challenges facing their sector, 3) work they are doing to halt degradation and improve freshwater, and 4) what good farming practices they would like to ensure are more widely adopted and encouraged moving forward.

The Dairy Sector Group identified a number of sector priorities for freshwater management. In reference to the rules there were comments on having rules that were clear and easy to understand, rules that encouraged good behaviour and not having to contradict other rules (e.g. green house gases). Balancing priorities in respect of ecological, environmental and social aspects were also mentioned. Other points raised regarding freshwater management were allocation, access, quality and supply, equitability, efficient implementation and accountability/responsibility and minimising the impacts industry/councils have on freshwater quality.

The challenges varied. There is a sense of uncertainty within the dairy sector. This included the huge variation of regulation to contend with such as Plan Change 1, green house gases, water and NPSFM and not knowing which to prioritise. Timeframes were an added challenge with the expected speed of change noting that the results of changes on farm took time (to be seen in water quality improvements) and were not immediately visible. Measurement data was also mentioned as lacking. Various resource challenges were also mentioned including a labour and

skill shortage within the industry, and availability of natural resource. Cost was a concern and allocation of water catchments and over allocation.

The group identified several actions they are doing to halt degradation and improve freshwater. This included utilising best practice principles such as planting, fencing, stock exclusion, retiring areas of land, wetlands on farm, and developing and using farm environment plans. Research and development was also identified and measurement and monitoring. Participation in discussion groups or farmer workshops was mentioned as a way of educating and upskilling landowners. Other comments included encouraging biodiversity, and future proofing.

The group identified a range of good farming practices when asked what they would like more widely adopted and encouraged moving forward. These included more fencing and planting, responsible and efficient use of nitrogen, adoption of farm environment plans, appropriate land use (especially steep hill country), infrastructure to suit farming practice, appropriate design of properties to protect sensitive areas and generally utilising industry good farming practices. Also mentioned was utilising fertiliser industry quality assurance programme contractors or 'Spreadmark' contractors as part of good farming practice.

5.1.2.2 Dairy sector – written and online feedback

Written feedback via email was received from DairyNZ and online via EngagementHQ from Fonterra and one other respondent in which they responded to five questions regarding freshwater management. The questions asked for feedback on 1) their priorities, 2) the challenges facing their sector, 3) work they are doing to halt degradation and improve freshwater, 4) what else should be done, and 5) suggestions on how we should manage freshwater in planning documents to give effect to the NPSFM.

Priorities

Priority areas for freshwater management were identified in the feedback. The priorities are:

Catchment scale science basis

A key priority identified by the dairy industry for freshwater management was that water quality be well understood at a catchment scale with robust data informing decisions. It was thought that all on-farm changes and regulation be underpinned by the best available science regarding the catchment, hydrology, contaminants source and transport pathways. It was felt that the science needed to be in place to allow farmers to make reliable and accurate land use investment decisions to implement effective mitigations and that this same information should be used to ensure that any rules in regional plans are practical, effective and implementable.

Edge of Field Mitigations

It was shared that DairyNZ, NIWA and dairy companies are funding implementation and studies on the effectiveness of a range of "edge of field" mitigation tools, to treat contaminants before they leave the farm. There was mention of partnering to monitor constructed wetlands and support for a number of bioreactor performance trials. Bioreactors were described as pits filled with bark that support the process by which nitrogen from water is removed by naturally occurring denitrifying bacteria and converted into harmless atmospheric nitrogen gas. It was also shared that DairyNZ is working with partners to understand how detainment bunds can reduce sediment, phosphorous and bacteria levels. It was noted that constructed wetlands can reduce levels of sediment, nutrients and microbes such as E. coli which can significantly improve the water quality exiting the wetland, and the ecology of downstream water bodies. It was shared that together, DairyNZ and NIWA carried out a number of case study and have developed guidance on constructing wetlands on farmland.

Farm Plans

It was shared that Farm Environment Plans were owned by farmers and developed with input from qualified experts. The plans were described as identifying activities which pose a risk to water quality, and actions to avoid, remedy or mitigate adverse effects. The plans were also

tailored to reflect farm geography, systems and farmer aspirations, and underpinned by industry agreed minimum criteria that should be met by all farmers. It was also shared that Farm Environment Plans include actions to protect biodiversity and reduce greenhouse gas emissions, help identify linkages across the farm business and supports continuous improvement through being regularly updated. It was noted that to date 6100 dairy farms throughout New Zealand had Farm Environment Plans and under the Dairy Tomorrow commitment all dairy farms would have a Farm Environment Plan by 2025.

Opportunities to improve systems to minimise effects on water quantity and quality
Other priorities for freshwater management in the dairy sector included:

- prioritising water efficiency at manufacturing sites (with targets to reduce water use at these sites by 30% by 2030);
- upgrading wastewater treatment facilities (15 sites, investing more than $400million by 2030);
- Fonterra suppliers to be operating under a high quality farm environment plan;
- the use of risk - based tools to engage farmers and to allow for "baselining risk" and monitoring improvement over time
- annual reporting to farmers on their individual environmental performance.

Challenges

Four areas were identified in the dairy sector written feedback as freshwater challenges facing the sector. The challenges are:

Complexity of numerous regulations
A key challenge identified by the dairy sector was the raft of regulatory changes driven by central government. It was shared that these regulations had required immediate changes to be made to farm systems which in some cases incurred high costs or repercussions in other areas of farm systems i.e., available feed from changes to intensive winter grazing practices. Some farms were still implementing the remaining regulations such as for stock exclusion requirements and stock holding areas rules. The view was that the full effect of these regulatory changes are yet to be seen making it difficult to understand the improvements results in freshwater quality. It was also shared that farmers were not only facing changes to regulation for freshwater but also for methane emissions, biodiversity, animal welfare, as well as meeting biosecurity, pest management and traceability requirements. Additionally, the uncertainty facing the industry and inconsistency across regions with upcoming regulatory change would be a challenge for industries operating nationally. It was also noted that meeting new legislation such as drinking water standards is a challenge, particularly where water quality at the source of a water take is contaminated/compromised.

Timeframes for change
Another challenge identified was meeting community objectives within catchments which often required farm system changes. Adhering to rules, obtaining resource consents and reducing to limits could all involve investments in technologies or infrastructure or changing farm practices that could reduce profits or incur costs. The view was that it took time to integrate these changes whilst maintaining a profitable farm system and meeting the needs of animals and staff. There was mention that in some cases effective mitigation methods might involve significant capital or operational investment and that it was difficult to justify such expenses when further regulations may require further changes or restrict activities. The view was that Councils could review or change plans every 10 years, whilst farmers needed to plan 20-30 years in advance and required a level of certainty before investing significant amounts of capital. Therefore, a key challenge for the dairy industry was timeframes for transition and ensuring that regional plans allowed enough time to implement changes to meet catchment objectives with ease while maintaining production and supporting the economic viability of their communities.

Reliability of access to resource

Another challenge that the dairy industry faces is around certainty of access to natural resources in the future. It was thought that the impacts of climate change would likely impact access to both water takes and land and that it was important that any policy settings made now were cognisant of the future challenges facing farms. Water use for dairy farming has a seasonal pattern, linked to milk production and grass growth. Dairy farms need a reliable water supply during the summer/milking season, to wash down the dairy shed and for milk cooling to meet food safety requirements. Without a water supply, milking could not go ahead. Year round access to stock drinking water was also mentioned where quantities were variable and affected by weather patterns. It was noted that some farms in the Waikato use irrigation to increase the productivity and reliability of their farm systems which requires secure access to water takes.

Dairy effluent management

In relation to dairy effluent management, a respondent noted that there is no way of ensuring that all dairy farmers have the right dairy effluent systems, or appropriate management of systems, to allow them to look after the quality of water. The respondent noted that the existing permissive rule framework for dairy effluent systems in Waikato means that many choose not to upgrade systems.

Work the sector is currently doing to halt degradation and improve freshwater

It was shared that dairy farmers were carrying out on-farm actions to mitigate risks of contaminate loss from their farms. This, in part, was being led through the Dairy Tomorrow strategy which builds on previous commitments (i.e., the Dairy Clean Streams Accord and the Sustainable Dairying Water Accord). This programme was described as seeking a further step change in the management of risks to waterways posed by dairying. It recognised that all waterways were unique, and that a one-size-fits-all approach would in many cases not drive the outcomes sought. The approach to management of water quality was based on the inherent risks posed by each dairy farm in the context of climatic and environmental factors (e.g., soil type, rainfall, topography), the sensitivity and water quality of receiving environments, and targeted farm-specific actions that are developed collectively by both farmer and qualified experts. It was thought this approach would drive faster and more efficient improvements in water quality outcomes. The feedback noted examples of actions dairy farmers are taking to achieve different objectives of water quality including excluding stock from waterways through installing fencing and crossings, stock crossing points installed bridges or culverts over Water Accord waterways, riparian planting to provide habitat and shade, improvements in effluent management practices. Other actions included riparian and critical source management as key parts of Farm Environment Plans, reducing fertiliser use and increasing efficiency of nutrients by applying when appropriate, nutrient budgets, use of soil testing to further improve the accuracy of fertiliser applications. The dairy industry's purchased nitrogen surplus target and farmers reducing contaminant losses through a number of catchment-scale projects was also noted.

A number of Waikato catchment initiatives were also identified involving Dairy NZ, Fonterra and the wider dairy industry. It was noted several joint projects with WRC in Waiomou and Waitoa, work in the Mangaone and Mangapiko Streams and our Living Water project at Lakes Areare, Ruatuna and Rotomānuka. Other initiatives include: designing dairy effluent systems to the Farm Dairy Effluent Design Standards, reducing water use and take at sites, implementing changes and using innovation to improve quality of wastewater before it is discharged, employing advisors who work one on one with farmers on improving environmental performance.

What else should be done

Four areas were identified in reference to what else should be done. These ideas on what else can be done are:

Improving science basis
It was thought that strengthening the water quality data available to assess the state and trends of catchments would provide greater clarity of the underlying pressures and stressors of the waterbody. It was shared that DairyNZ had been focussing on furthering their science understanding of ecosystem health through eDNA testing. Macroinvertebrates were described as integrators of upstream land use pressure and have been collected alongside more advanced DNA sampling approaches. It was thought that the study will increase spatial understanding of ecosystem health, how it changes longitudinally through river networks, and how it responds to riparian management.

Catchment groups
There was acknowledgement that catchment groups had the potential to be a key driver for on-farm change, and provide leadership in environmental management including water quality, greenhouse gasses, and biodiversity. It was also noted that DairyNZ is supporting catchment groups regionally by connecting farmers and offering environmental and dairy system expertise.

Recognition of industry processes
There was feedback that the dairy industry in the Waikato was represented by DairyNZ, and milk supply companies. There was the view that these companies had on-the-ground connections to farmers and communities and had recently started to drive environment improvements through some of their supply agreements. These processes were described as being well-established in the dairy industry and had the ability to iterate and improve quickly as time and new information came to light.

Dairy effluent management
In relation to farm dairy effluent, a respondent suggested there needs to be consents issued for the storage and disposal of dairy effluent, consistent with other parts of the country, with clear guidelines and standards for accredited designers to design and advice against, and as a mechanism for WRC to assess against when consents are applied for and compliance visits. The respondent also suggested that each farm is reviewed/checked each year to ensure compliance with consents.

Suggestions on how WRC should manage freshwater in its planning documents to give effect to the NPSFM

Key suggestions were made as to how WRC should manage freshwater in its planning documents to give effect to the NPSFM. These included:

Ecosystem health approach
There was feedback that when assessing ecosystem health, the primary definition should be determined using aquatic macroinvertebrate indices. It was thought that macroinvertebrate indices were recognised as an integrative measure where the community composition and their densities were the sum of all the components and the long-term exposure to the condition of those components they are exposed to. It was described that where macroinvertebrate community indices were acceptable, then it could be said that ecosystem health would be accounted for. However, when the macroinvertebrate community indices are poor, then more detailed assessments could be made considering all the components that make up ecosystem health to identify which ones may be causing the stress. It was suggested that once the pressures and stressors were identified then policy processes could implement mechanisms that reduce the risk of further pressures or stress on waterbodies. For the dairy industry, it was thought that actions that are taken on-farm to reduce risks to ecosystem health often had co-benefits for aesthetics and recreational values such as stock exclusion and planting for stream bank stabilisation and the reduction of overland flow.

Risk-based approach
A risk-based approach to freshwater management was identified as important to the dairy industry. The suggested approach involved the management of diffuse discharges from farms

recognising the four 'diffuse' contaminants (N, P, sediment and E.coli). It was noted that any prioritisation of attention on any one of these contaminants should be on the basis of the water quality issues in the receiving environment. The use of FEPs was described as the principal means of identifying and recording farm-specific risk and the actions required to address the risk. Where a rule in a regional plan or regulation requires a FEP, FEPs should be certified, contain time bound actions, have implementation audited and have appropriate review and enforcement processes. It was thought that a risk-based approach to the management of diffuse discharges from farms be in place rather than an approach that seeks to manage diffuse discharges on the basis of farm-scale modelled nitrogen leaching rates. Further suggestions included the use of a risk-based scorecard approach such as the Fonterra N-risk Scorecard or a govt-developed risk tool (including the use of an aggregated score output) for dairy N risk assessment and the associated use of a drystock (all contaminant) Risk Scorecard; or other approved, objective risk-based decision tool. The risk score being used to create a farm baseline and, within a regional plan framework, as the basis for the 'drafting gate' (for permitted activity/consent categories), for the target itself and to inform the development of actions in FEPs.

Utilising existing regulations and prioritising co-benefits

It was thought that a considerable number of new regulations had been introduced through the National Environmental Standards for Freshwater and the Resource Management (Stock Exclusion) Regulations 2020 and that the full impact of these regulations were yet to be seen. There was comment on how a number of these regulations (such as the intensification regulations) would be revoked come 1 January 2025 and replaced by rules in regional plans. It was acknowledged that while regulations were best tailored to the context that they would be enforced in, there was an opportunity to build on the lessons learned through the implementation of national regulations, retain what works well and tailor remaining rules to meet the objectives of the community. Another example of national regulation mentioned that had not yet come into effect was the Freshwater Farm Plan regulations. It was thought that the Waikato Regional Council should therefore utilise Freshwater Farm Plans where possible in their planning response to the NPSFM. There was mention of how an approach to freshwater policy should be cognisant of the wide range of co-benefits that can be achieved. When seeking environmental outcomes on farm, the view was to take an holistic approach and understand impacts of actions across the whole farm-system.

Enabling a fair transition

A priority identified by the dairy industry was to ensure adequate time for farms to adapt their businesses and operations to meet the objectives of the community and respond to changes in Regional Plans. It was shared that on-farm changes took significant resources both financial investment and time, therefore it was important to allow for appropriate timeframes to plan and implement any changes on farm to minimise disruption to other parts of the farming business. Suggestions were made for enabling a fair transition:

- Taking time to design, pilot, and introduce programmes to implement environmental management.
- Allowing time for those affected by regulation to develop skills that help with adaptation.
- Building trust and engagement between regulators and farmers, laying a foundation for an effective and efficient transition.
- Allowing for diversity between farms, farmers, and the risk of contaminant loss to be pragmatically considered in research, development, and extension.

Other suggestions participants sought included:

- Greater certainty regarding environmental limits / outcomes to enable greater certainty for resource management users
- Further guidance/definitions on offsetting/compensation and how it may be applied to mitigate effects
- If fundamental changes are proposed such as reducing direct discharges to waterways then alternatives are also considered i.e. discharge can occur as a contingency

- Investment in robust science / data to support changes
- Ensuring clear pathways towards adaptation or managed retreat for the impacts of climate change
- A move to a consenting framework for farm dairy effluent systems.

5.1.3 Drystock sector

5.1.3.1 Drystock Sector Group – workshop /meeting

Ten people attended the Drystock Sector Group meeting, including staff from DeerNZ, drystock farmers, Beef+Lamb, AgResearch, Overseer Ltd, Meat & Fibre, Waikato Federated Farmers, King Country Rivercare and regional councillors. The Drystock Sector Group received a presentation on the Freshwater Policy Review followed by a questions and answers session. Comments and questions were made by participants regarding various aspects of the NPSFM and process. There were a few who commented on the FMUs. Comments included those living inland not having a good understanding about the impact they might be having on the coast (FMU as a receiving environment), mention of how the FMUs were too large and needed to be broken down further, and how West Coast harbours should have their own FMUs.

There was a question about the hierarchy of obligations [Te Mana o te Wai], in particular whether 'the health needs of people', included the discharge of wastewater. A comparison was made as to whether the needs of urban users flushing the toilet had greater priority than farming business. There was also comment on the fear or threat that drystock farming could be marginalised and converted to forestry to offset lowland dairy discharges.

5.1.3.2 Dry stock sector – online feedback

Three online responses via EngagementHQ were received from participants working in the drystock sector. Respondents provided feedback to five questions regarding freshwater management including feedback on 1) their priorities, 2) the challenges facing their sector, 3) work they are doing to halt degradation and improve freshwater, 4) what else should be done, and 5) suggestions on how we should manage freshwater in planning documents to give effect to the NPSFM.

When asked what are the freshwater challenges or issues facing their sector or industry, those from the drystock sector noted a key challenge being the need to comply with the restrictions that are currently in place in the Lake Taupō Catchment, explaining that further regulation over and above this will severely impact the viability of farming in the area. Another respondent noted that servicing debt, ongoing costs and continuously changing legislation impacts their ability to invest back into their land and focus on on-farm mitigations (relevant to protecting water, which is a metric for their business).

A participant noted that a key priority for the drystock sector in the Lake Taupō catchment is controlling nitrogen discharges, an achievement that one respondent noted that farmers within the catchment are "proud with what they have achieved since Waikato Regional Plan Variation 5[4] came into effect". A priority for this respondent was to educate the public about this "excellent work and considerable cost already contributed by farmers in this regard". In addition to nutrient management in Taupō, others noted key priorities for their property includes:

- fencing off waterways;
- winter grazing plans;
- best practice farm systems;
- increasing soil conservation areas on farm to protect soil from erosion.

A range of actions were identified as part of the work they are doing to halt degradation and improve freshwater. Respondents noted that drystock farmers in the Lake Taupō catchment have been farming within nitrogen discharge allowances for more than 12 years. They consider

[4] Lake Taupo Chapter 3.10 of the Waikato Regional Plan

the rules to be robust and note that water sampling in the Lake show the targets are being met (which is ahead of the 20 year target). In addition, respondents are working with WRC to increase soil conservation areas and attend Farm Environment Planning days with Beef + Lamb). One respondent noted that monitoring needs to continue to check progress towards achieving targets.

When asked what else should be done to improve water quality, the responses from those in the drystock sector ranged from "nothing" for the farming sector (noting there are still some septic tank systems that need to be upgraded in lakeside settlements), through to a suggestion to make funds more accessible for the next generation of farmers to invest in fencing and planting. One responded reiterated the need to educate others about the progress made in improving water quality in the Lake Taupō catchment.

In regards to suggestions for how WRC should manage freshwater to give effect to the NPSFM, respondents from the drystock sector suggested maintaining the current farming rules (particularly in the Lake Taupō catchment), with plan documents reflecting an allowance for targeted and local legislation, above a 'one size fits all" approach. There was a desire to showcase and support industries and businesses that are achieving high standards.

One suggestion for improvement related to the treatment of sewerage particularly from the small lakeside communities that are "on old septic tank systems".

5.1.4 Forestry Liaison Forum – workshop/meeting

There were 16 participants at the Forestry Liaison Forum including pulp paper and fibre producer, NZ Forest Managers, financial investment forest companies including forestry marketing and forest harvesting. Forestry Liaison Forum members received a presentation on the Freshwater Policy Review followed by a questions and answers session. Forum members were interested in the work that WRC was undertaking with regard to water quality and forestry, particularly in relation to developing any plan provisions more stringent than the NESPF.

While acknowledging that WRC's plans can be more stringent than the NESPF in certain situations,[5] the forum members noted that WRC has obligations to justify its reasons for being more stringent, including through an assessment under section 32 of the RMA. For example, the forum members highlighted that the NESPF doesn't explicitly require monitoring of waterways, but if WRC sought to introduce any such requirements, it would have to demonstrate that it was justified under a section 32 evaluation.

Forum members stated that, within the sector, the understanding to date is that the NESPF is working. One forum member felt that there has been no evidence or monitoring data seen by forum members to suggest that the water sector's operations are leading to real problems for water quality.

Concerns with 'grandparenting' were raised. Members stated that water quality priorities remain those they have long argued for; measurable standards reflecting the sustainable balance of social, economic and environmental outcomes. More specifically, one member noted that they assumed that the obligations in terms of environmental performance remain the same regardless of land use. To that extent, a grandparenting approach can be problematic.

Forum members stated that they did not want to see a repeat of grandparenting of forestry to provide for water quality for downstream users (highlighting an example of Taupō and PC1). Members were interested in the timeframe to enable a level playing field with respect to environmental expectations of land use.

[5] Regulation 6, NESPF.

Members highlighted uncertainty with how major storm events will be dealt with, particularly in relation to any plan change rules. Questions were also raised in relation to central government's views on, and priorities for, water quality, and whether these aligned with those of WRC since PC1 was developed.

5.1.5 Fruit and vegetables – written and online

Written feedback via email was received from Horticulture New Zealand (HortNZ), and the Pukekohe Vegetable Growers Association (PVGA). Four other online responses via EngagementHQ were also received identifying themselves as part of the horticulture sector. The feedback from HortNZ covered multiple aspects of freshwater management. While their feedback was not structured in terms of WRC's questions, HortNZ's feedback has been summarised and presented under the question headings along with the other respondents for this report. The five areas covered in our questions to the sector groups include feedback on 1) the sector's priorities, 2) the challenges facing their sector, 3) the work they are doing to halt degradation and improve freshwater, 4) what else should be done, and 5) suggestions on how WRC should manage freshwater in its planning documents to give effect to the NPSFM.

Those in the horticulture industry emphasised a priority for water abstraction for crop irrigation, with guaranteed volumes, allowing for flexibility and new land conversions. One participant noted a priority is to constantly seek better ways of running their business and grow quality vegetables using minimal inputs.

PVGA considered that the priority for food security should first and foremost be to protect domestic supply, with the majority of fresh vegetables for domestic consumption produced by their vegetable growers. The next priority was identified as supply for export, including consideration of the supply of vegetables to neighbouring countries.

PVGA stated that the recognition and inclusion of the concept of Te Mana o Te Wai, and Te Oranga o te Taiao, which refers to the importance of maintaining the health of our natural resources, such as air, water and soil, and their capacity to sustain life intergenerationally, is central to its ability to provide fresh vegetables for people.

A healthy and connected natural environment that restores the mauri of the environment is supported, including through land management principles that create, reserve and enhance healthy, viable soils, avoiding the exacerbation of invasive soil diseases.

HortNZ sought an integrated approach to freshwater management, where the freshwater vision not only directs instream freshwater outcomes, but also directs freshwater limits. HortNZ have developed their own freshwater vision for Waikato as follows:

> Food production in the region/FMU is supported by innovative and sustainable land and water management practices that:
>
> - Maintain food security for New Zealanders
> - Provide for the domestic supply of fresh vegetables
> - Support the transition to low emissions land use
> - Improve resilience to the effects of climate change
> - Support the use of Highly Productive Land for primary production

When asked what are the freshwater challenges or issues facing their sector or industry, horticulture online respondents identified water takes and access to sufficient water being a key issue or challenge. In particular, there is challenge for maintaining extraction volumes to meet the current demand (including peak demand) and to provide for unknown future issues (i.e. increasing weather extremes). Respondents also noted there was insecurity to invest in water infrastructure with uncertain outcomes over water allocation/availability (including water storage).

Other participants noted other cost pressures on vegetable growing businesses (with viability of business in question), with concerns raised about further regulatory compliance costs on their business. Participants noted a key challenge is to keep the cost down for the growing of the vegetables so that all fresh produce is affordable for all New Zealanders.

PVGA identified several challenges facing the industry. At a high-level, these are summarised as follows:

- Ensuring adequate access to water and nutrients to maintain both current and future demand for vegetables.
- National and regional policy development (including PC1 in Waikato) struggling to acknowledge the specific requirements of commercial vegetable production.
- The need for growers to rotate crops across different parcels of land and manage operations and resources at an enterprise level.

HortNZ identified several key challenges facing the horticulture sector at a national level. Food security for New Zealanders, particularly with regard to domestic supply, is identified by HortNZ as a strategic challenge. HortNZ consider that regulatory decisions on how freshwater is managed have consequences for domestic food supply for a range of reasons.

With regard to greenhouse gas emissions reduction targets, HortNZ consider a key challenge is supporting the diversification of horticulture and the transition to low emissions food production. HortNZ also consider that the way water is managed will be critical for adapting to climate change and managing natural hazard risks. Another key challenge noted by HortNZ is the protection of highly productive land.

Those working in the horticulture industry noted a range of work already being undertaken to halt degradation and improve freshwater, including an industry coordinated "Good Agricultural Practice" programme and certified compliance programme specific to sector operation/practice. In addition, respondents noted the following farm practices and actions being undertaken:

- Irrigation and fertiliser planning to work with precipitation;
- Improvements in irrigation efficiency;
- use of slow-release fertiliser with precision spreading and/or the reduction in fertiliser use;
- silt ponds/traps to reduce sediment runoff;
- cover cropping and resting land if land is prone to runoff during heavy rain seasons;
- wheel track ripping;
- planting of fauna and "yearly maintenance of surface water catchment";
- regular monitoring of farm environment.

PVGA stated how each generation of vegetable growers in the sector has added to the experience of the last through improved awareness, science and technology, and the adoption of good management practices. The use of the New Zealand Good Agricultural Practice (NZ GAP) system was highlighted as an example of the sector's existing sustainability obligations and commitments.

PVGA considered it was important for WRC to acknowledge that growers have been improving land management practices for many years, including through initiatives such as the 'Franklin Sustainability Project' and the 'Don't Muddy the Waters Project'. With regard to fertiliser use, PVGA highlighted how the majority of growers are already undertaking various mitigation strategies to reduce effects, with significant investment in management tools and practices, and engagement with technical experts to support decision making.

While HortNZ did not explicitly respond to the question about the work they are doing to halt degradation and improve fresh water, several actions undertaken by the sector with regard to freshwater management are contained in its online feedback and outlined below.

HortNZ stated that growers are efficient users of water and horticultural activities have high technical and allocative efficiency. Within the sector, studies are underway to better understand abstraction requirements. These include, in conjunction with BOPRC, several case studies to understand the impact of irrigation on yield, fruit quality and orchard gate returns. Other studies relate to better understanding water requirements for kiwifruit crops.

HortNZ also highlighted how water harvesting and storage for direct use, augmentation or recharge is a method that can provide the irrigation reliability required by horticultural crops with lesser impacts on freshwater outcomes. Provision of crop survival water within an appropriate 'boundary' is mentioned as achieving efficient allocation and enabling ecological objectives to be met.

Other actions undertaken by the sector include accounting for discharges and understanding the level of horticultural production that target attribute states can accommodate, managing erosion and sediment loss, undertaking nutrient research, monitoring and modelling, and implementing codes of practice and GAP farm plans.

In reference to what else could be done respondents suggested providing education and support for growers; reduction in urban based contaminants; removal of koi carp and contributing to mass riparian planting of waterways. A participant suggested targeted rates for this purpose.

PVGA considered that specific land management practices should be industry led and nationally consistent, using the existing NZ GAP framework. PVGA suggested that in future, accurate modelling and accounting could be added as an additional component to the environmental management system within the NZ GAP programme. In PVGA's view, this would avoid inconsistencies and duplication of effort. PVGA noted that ongoing dialogue between WRC and relevant industry bodies was essential for future policy development. PVGA also supported connecting and working with rangatahi.

HortNZ also considered that further community and tangata whenua consultation will be required to meet the vision and value setting within the NPSFM framework. HortNZ is interested in further engagement with WRC to help inform changes to its planning framework.

When asked how the Waikato Regional Council should manage fresh water in its planning documents to give effect to the NPSFM, responses ranged from those who wanted standards that are achievable and cost effective, through to the need to have a special overlay for food production blocks. One respondent requested that it should be easy to allow land to be converted for growing and granting water rights without too much difficulty and uncertainty. They mentioned that all growers have a variety of different water requirements (depending on crop type, crop maturity, crop rotation, land rotation, and resting). The respondent feels this should be allowed for in the plan.

PVGA requested that all aspects of proposed legislation be considered when developing new freshwater policy. This included future requirements concerning highly productive land. PVGA indicated their support for the protection of highly productive land and the intention to discourage inappropriate use and fragmentation of land that can sustain viable commercial vegetable production, provided that the definition of highly productive land captured all of the essential criteria that comprise an economically viable production unit.

PVGA considered that the need for crop rotation should be at the forefront of policy development and not inhibited by over-regulation. The need for resources to be managed at an enterprise level and not tied to a specific parcel of land was highlighted as a major issue, given

that growing operations often lease and own land within different FMUs and/or catchments, and utilise all land within rotational practices. PVGA support enabling an enabling a pathway for enterprises to operate in a manner that ensures adequate ability to carry out crop rotations and includes access to essential resources such as water (and nutrients).

PVGA stated that the specified area for Pukekohe set out in Appendix 5 of the NPSFM is not extensive enough and does not include several important growing areas. It has requested revisions from the Government to amend this area. PVGA also requested that WRC consider these additional areas.

Transportation is another aspect that PVGA has requested be considered by WRC, stating that there is a great deal of inefficiency in sending export freight from Franklin to the Port of Waikato. PVGA expressed support for the introduction of an agri-food hub in a location that is in proximity to the growing hub of Pukekohe, possibly Tuakau, where growers could utilise existing railway to transport containers to the port, and preferably in time, this could be upgraded to electric rail.

HortNZ provided detailed feedback on how the NPSFM should be given effect to within WRC's planning framework. This included:

- Having specific regard to Specified Vegetable Growing Areas.
- Ensuring consistent long-term visions for FMUs across all regions where fruit and vegetables are grown. As discussed above, HortNZ proposed their own long-term vision for the region.
- With regard to the concept of Te Mana o te Wai, providing a definition for human health that recognises food as essential for human health, and a regional interpretation where the management of freshwater supports lower emissions land use and improves climate change resilience.
- Including values in Appendix 1B of the NPSFM for irrigation, cultivation and food supply, commercial and industrial use, and a new value for food production, for all FMUs in Waikato. Freshwater outcomes relating to these values are identified.
- Supporting the proposed FMU boundaries.
- Including additional outcomes to support ongoing horticulture production.

HortNZ considered WRC's Regional Policy Statement and Regional Plan should seek to:
prioritise the health of people by supporting the resilience of the domestic food system

- support transition to low emissions food production
- take an integrated approach to climate adaption and natural hazard risk management
- take an integrated approach to freshwater management that recognises the value of highly productive land and prioritises and supports the use of highly productive land for primary production.

In addition to general commentary, HortNZ advanced specific drafting to include in WRC's relevant planning documents. These related to proposed drafting of freshwater visions, interpretation of Te Mana o te Wai in the Waikato regional context, and individual freshwater values.

5.1.6 Kiwifruit - written

Written feedback from New Zealand Kiwifruit Growers Incorporated (NZKGI) was received covering five areas of freshwater management. These areas included feedback on 1) their priorities, 2) the challenges facing their sector, 3) the work they are doing to halt degradation and improve freshwater, 4) what else should be done, and 5) suggestions on how WRC should manage freshwater in its planning documents to give effect to the NPSFM.

NZKGI identified several priorities for freshwater management, which are set out in the industry's five-year strategy on water, released in 2019.[6] The primary vision of the sector is to '*collectively protect and enhance our water resources for our people, our environment, and our communities, while enabling kiwifruit industry growth*'.

Outcomes to be achieved by 2023 are identified. These include having reliable scientific data and a clear understanding of the current and intended future state for kiwifruit industry use, good practice being understood across the industry, engaged communities through information, communication and participation, and a mindset shift to a proactive collaborative industry-wide approach.

Several indicators of success are listed, covering various actions to be implemented by 2025, including practices for efficient water use and soil health, grower decision-making tools for water use and quality, involvement in shaping water policy, and plans to meet environmental standards. Positive impacts for the industry's growers by 2025 from the achievement of the outcomes discussed above are also identified.

NZKGI listed eight main freshwater challenges facing the industry, including:

- having reliable access to water for their needs
- having the ability to apply sufficient fertiliser
- understanding how Nitrogen application may be affected by new policy, particularly in areas where there are worsening water quality trends due to cumulative effects
- how WRC will address competing values of, and demands for, freshwater
- whether emerging policy will acknowledge and provide for those who have voluntarily made improvements with respect to freshwater management
- the need to grow the industry and potential implications regarding freshwater
- uncertainties around climate change
- the need for, and timeframes required for, science to identify how the industry can improve in terms of its effects on freshwater.

NZKGI identified actions it is undertaking to halt degradation and improve freshwater. These are primarily related to scientific trials, and the provision of advice and resources to growers. The industry stated that considerable research, monitoring and modelling has been undertaken to understand the nutrient balances and increase nutrient use efficiency in kiwifruit orchards, including within the Waikato region. Several active case studies with growers, in conjunction with Bay of Plenty Regional Council (BOPRC), were identified in the NZKGI written feedback. These case studies seek to understand the impact of irrigation on yield, fruit quality and orchard gate returns, with case study findings are due to in September. Other studies, workshops and information for growers are also developed and run by the industry. Some key resources are listed in their response including workshops related to nutrient, irrigation and freshwater management.

In reference to what else should be done to improve freshwater, NZKGI stated that the locations of kiwifruit orchards within the region need to be considered in relation to the results of State of the Environment reporting, to identify the effects that the industry is having on waterways and where it needs to focus its efforts. NZKGI are interested to work with WRC to understand the issues for the industry and the region, and how both parties can work together to address the issues.

NZKGI provided a range of considerations for how WRC should manage freshwater in its planning documents to give effect to the NPSFM. These included adopting a catchment specific approach that focuses on priority catchments, working with industry regarding opportunities for improvement, acknowledging and or providing incentives for those who are making real efforts

[6] *A five-year plan to reach our Kiwifruit Industry's water goals. He Wai mō Āpōpō Water for the Future.* https://www.nzkgi.org.nz/wp-content/uploads/2021/06/Water-roadmap-Achieving-the-kiwifruit-industry-water-goals_Full-version.pdf

to improve their management of freshwater, and providing the right mix of 'carrot' vs 'stick' regulation.

Other suggestions include making provision for crop survival water during dry condition. Working collaboratively through programmes such as Zespri GAP, providing realistic timeframes to achieve goals, and identifying science needs and timeframes to complete research with industry. NZKGI also highlighted the importance of getting the balance and timing right within policy documents.

5.1.7 Pork - written

Feedback from NZ Pork was received online via EngagementHQ covering four areas of freshwater management. These areas included feedback on 1) the challenges facing their sector, 2) their priorities, 3) the work they are doing to halt degradation and improve freshwater, and 4) suggestions on how WRC should manage freshwater in its planning documents to give effect to the NPSFM.

The freshwater challenges identified by the respondent included access to reliable supplies of fresh water suitable for stock drinking and farm system requirements. They also noted that effluent produced from piggeries has a high nutrient content, where land application of effluent provides a valuable natural source of nutrients to support plant/crop growth and reduces waste from the pig farming system. The ability to recycle effluent in this way is integral to commercial pig farming systems and that relationship with freshwater systems is an important value to recognise.

Key freshwater priorities identified by the respondent from the Pork industry included:

- Clean water for stock drinking.
- Washdown water to maintain hygiene standards and animal welfare.
- Reliability of water supply.
- Fair allocation for farming.
- Maintain assimilative capacity of the land and water bodies.

The respondent noted that pig farmers in New Zealand have "a firm grasp of environmental issues and demonstrate a high level of innovation and environmental stewardship", and identified work already undertaken to halt degradation and improve freshwater. They noted that the New Zealand pork industry has committed significant time and resource to Sustainable Farming Fund projects centred on environmental initiatives and has developed and implemented the following guides and plans to assist farmers identifying environmental risks and mitigations.

- Environmental Guidelines and Nutrient Management Guidelines;
- Good Management Practices for Outdoor Pigs;
- Farm Environment Plan Template;
- Effluent Management Template

Regarding the question which sought suggestions on how the Waikato Regional Council should manage fresh water in its planning documents to give effect to the NPSFM, the respondent from the pork industry noted that they felt that long term version statements must recognise and respond to the food production value associated with extensive and intensive farming systems in the Waikato Region. They stated that the particular values associated with domestic food production and food security within which pork production is a component and reliance on freshwater resources must be provided for.

The respondent feels that there are overlapping issues that council need to be cognisant of in setting freshwater policy and regulation. They explain that achieving one environmental outcome may impact another and trade-offs may be required. For example, there is an increasing push by regional councils to provide for or expand on-farm effluent storage to support controlled application to land during suitable environmental conditions. The submitter

explained that while this can assist with contaminant management, this can increase greenhouse gas emissions through larger areas of storage and longer duration of storage. They further explain that this is at a time when farmers are being asked to reduce and pay for greenhouse gas emissions.

5.1.8 Rural advocacy – irrigation - online

IrrigationNZ provided online feedback via EngagementHQ covering five areas of freshwater management including feedback on 1) the challenges facing their sector, 2) their priorities, 3) the work they are doing to halt degradation and improve freshwater, 4) what else should be done, and 5) suggestions on how WRC should manage freshwater in its planning documents to give effect to the NPSFM.

The respondent noted that their perspective on freshwater challenges comes from their role as a representative of Waikato irrigators and irrigation user groups. They noted that key challenges they see facing the irrigation industry are:

- New central and regional government regulations have been adding to water management confusion for farmers and growers. There are several pieces of overlapping regulation and an overall lack of clarity on how NPSFM will be delivered and what this will mean for irrigators.
- An increasingly dry climate means more pressure on water sources such as the Waikato River and other surface or ground water zones. This changing climate presses the need for water security and reliability through the building of water storage, but there is a lack of strategic direction and advice to regional authorities from central government for this type of infrastructure.
- As urban areas continue to grow, there is more pressure on water sources and less available fertile land for farming. Land use change, e.g. moving away from dairy to intensive horticulture, will also potentially mean an increase in pressure on water sources for supply reliability.

The respondent noted that their group shares many of the same priorities for freshwater management as other New Zealanders, including:

- to reduce their environmental footprints and see improvements in the health of our waterways; and
- sustainable use of water that allows this resource to contribute to the wellbeing of communities

The respondent noted several actions and programmes that their group had initiated and are currently implementing, to assist with halting degradation and improving freshwater. These initiatives include training programmes that teach farmers and other rural professionals how to use water efficiently in farming practice, including:

- NZ Certificate in Irrigation System Design;
- water meter verification training;
- irrigation operator and manager training; and
- NZ Certificate in Irrigation Performance Assessment.

In reference to what else should be done, the respondent suggested that support from WRC for their training programmes will expand their reach and allow more professionals to access these resources.

They also noted that establishing water user groups (as seen in other regions such as Northland, Hawkes Bay, Bay of Plenty and Canterbury) can allow water allocations to be used in the most efficient and sustainable way by farmers or growers. They suggest the creation of these groups should be aided and encouraged by WRC.

In addition, the respondent suggested supporting investment in water storage for food and fibre farming use is a key step that WRC should be taking for sustainable freshwater management. They consider this will allow farmers to stay viable in a dryer climate, and still be able to provide for their community. They also consider that storage means there are fewer negative impacts on freshwater ecosystems from water takes.

When asked what suggestions the irrigation sector respondent might have on how the WRC should manage fresh water in its planning documents to give effect to the NPSFM, the submitter suggested the following:

- There is a strong need for clarity and consistency from the NPSFM in the rollout of freshwater farm plans (in particular modules relating to irrigation and dairy effluent). This will ensure that the new regulation is understood and is workable for farmers and growers.
- That WRC supports and adopts their accreditation programmes for people operating in the sector when giving effect to NPSFM. This training should include those involved in the Freshwater Farm Plan certification processes that comes out of the new NPSFM. This will ensure efficient designing of irrigation systems and appropriate assessment of the performance of existing irrigation equipment. This will allow best practice irrigation to be adopted,
- Water security and reliability needs to be considered a higher priority in order to balance the objectives of Te Mana o te Wai in water management decisions. From MPI's 2021 report Water Availability and Security in Aotearoa New Zealand Supporting the sustainability, productivity, and resilience of the food and fibre sector, building and investing in water storage is key for Te Mana o te Wai principles. They note that water storage allows negative ecological impacts on waterways to be decreased, and also allows the production of food and fibre to succeed in dryer conditions. The response also noted that the need for water storage is also highlighted in MfE's 2022 National Adaptation Plan draft.

5.2 Territorial authorities

5.2.1 Territorial authorities - online facilitated workshop

An open invitation was extended to the Territorial Authorities (TA) in the region to attend an online facilitated workshop. Fifteen people joined the online workshop from city and district Councils in the region. The TA workshop participants received a presentation on the Freshwater Policy Review followed by a workshop asking their feedback on three areas of freshwater management. These areas included 1) feedback on the challenges facing their sector, 2) work they are doing to halt degradation and improve freshwater, and 3) ideas on how WRC should give effect to the NPSFM in their planning documents.

Various challenges were identified that are facing the sector. A common theme was competing priorities together with the complexity of various regulations and policies to contend with and RM reform. There were comments about competing legislation including the National Policy Statement for Indigenous Biodiversity (NPSIB), NPSFM, National Policy Statement on Urban Development (NPSUD) coupled with climate hazards, numerous reforms happening at one time and Three Waters reform. Resourcing was also identified as a challenge (in cost and staff) in light of meeting expected requirements. Other competing priorities mentioned urban growth and development versus environmental protection, industry/economy versus human health protection, and managing development to avoid natural hazards. Continuing to achieve compliance and processes for consenting within a changing regulatory environment were also identified as challenges. Other challenges included the increasing demands for water resource, achieving climate change goals, communication and timelines affected by Covid, political pressures and achieving ecosystem health goals.

A range of actions were identified by the group as part of the work they are doing to halt degradation and improve freshwater. Upgrading infrastructure and planning including wastewater upgrades was mentioned. Integrated catchment management planning and implementation were also actions some TAs were involved in. Other actions included climate and conservation strategies including water conservation, submitting on national legislation in respect to funding for councils regarding technology, mapping and monitoring water quality, holding contractors to high standards and working with others to adopt a 'catchment wide approach'. Noting that a public health service representative was in the workshop, they mentioned how in working with local government they were able to issue health warnings and provide advice on environmental contamination, healthy policies and recreational water surveillance.

The group provided a range of ideas on how WRC should give effect to the NPSFM in their planning documents, including:

- ensuring sufficient resourcing, funding and monitoring
- avoiding conflicts with other NPS (e.g. NPSUD), aligning resource consents and assessments to planning documents, recognising district and regional growth plans, and taking into account sustainable development goals for addressing freshwater degradation
- quantifying and qualifying resources across catchments
- providing links to climate change mitigation (wetland management and peat bog protections)
- recognition of diffuse discharges and impacts, and importance of lifeline utilities
- replication across multiple district and regional councils and consistency in policy approach between catchment areas
- ensuring there is ongoing feedback and transparency on how catchments are tracking in FMUs (perhaps a GIS tool)

5.2.2 Territorial authorities – online feedback

There were two online responses from district council representatives. Their responses covered five areas of freshwater management including 1) feedback on the challenges facing their sector, 2) their priorities, 3) work they are doing to halt degradation and improve freshwater, 4) what else should be done, and 5) suggestions on how WRC should manage freshwater in its planning documents to give effect to the NPSFM.

One respondent noted several freshwater challenges facing their sector, including access to sufficient water from both surface and groundwater for public supply, noting that groundwater is over allocated or there is no supply for future public demand or economic growth. This represents a key challenge when accommodating new industries or rezoning in district plans for industrial land use.

In addition, concerns were noted about the climate change effects on water bodies including the potential for drying up of some water bodies in the long term due to climate change resulting less water available for public use.

In relation to water quality, the respondent noted a key challenge around contamination of drinking water sources due to economic and other human activities, including:

- Minimising contaminants entering freshwater bodies through point source discharge (e.g. from wastewater treatment systems)
- Minimising contaminants entering freshwater bodies through non-point source discharge (e.g. from stormwater systems)
- Ensure that the ability to retain reasonable mixing is retained.

One participant also noted that a challenge related to changes to legislation can require significant funding to meet standards and the pressure this puts on communities.

The respondents identifying themselves as representing local government identified a large number of priorities and workstreams for freshwater management, including:

- Ensure sustainable use of water
- Water conservation
- Demand management
- Improve data collection and analysis of water usage
- Minimise water pollution
- Minimising of overflows from wastewater systems into stormwater system and natural water courses during wet weather
- Minimising of water contamination through treated wastewater discharge
- Minimising of contamination of receiving water bodies by discharging contaminated stormwater into those water bodies
- Controlling of discharge contaminants from urban and industrial activities into stormwater system or natural water bodies
- Planning urban developments in a manner to minimise the degradation of our water bodies through District Plan
- Continue to restore, protect and enhance water quality of the Waikato River through all work that we do, understanding the wider environmental, cultural and health benefits that occur and achieve the goals of river legislation.

The respondents from local government highlighted a range of activities already undertaken to halt degradation and improve freshwater in their areas, with key actions aligning with some of the freshwater priorities they have identified, including:

- sustainable water management
    - water conservation strategy demand management plan developed with actions and timelines;
    - development of a long term water master plan;
    - promoting and implementing rainwater tanks in new development;
    - improved data collection through SCADA (Supervisory Control and Data Acquisition, a computer hardware and software system to monitor and collect data from pump stations, treatment plants, and reservoirs);
- minimising wastewater overflows, including:
    - wastewater inflow and infiltration strategy developed with an action plan to minimise wastewater overflows
    - regular CCTV inspections and condition assessment of wastewater network
    - Replacing aging wastewater pipes and upgrading of wastewater system
- minimising of water contamination through treated wastewater discharge and/or upgrading wastewater treatment plants.
- improvements for managing stormwater, including:
    - control of Stormwater discharge through resource consenting process for new developments and regular maintenance of stormwater system, consistent with the WRC stormwater guidance
    - regular maintenance of stormwater system
    - updating of stormwater catchment management plans
    - initiated discussions for construction of hydraulic models for better understanding and management of the stormwater system
    - controlling of discharge of contaminants from urban and industrial activities
- Monitoring of water quality in receiving environment as per comprehensive discharge consent conditions
- Including strategic direction relating to freshwater quality in district plans;
- Development and implementation of Joint Management Agreements with River Iwi

- Implementing education programmes, for example: Tama the Trout

When asked what else could be done, respondents noted there could be better regional and stakeholder collaboration for managing freshwater and improved public awareness and education campaigns. One participant suggested this could be through a coordinated freshwater education program rolled out by central government.

Participants also suggested improved data collection and analysis of water quality in natural water bodies, and obtaining a better understanding of site specific challenges, including cultural challenges.

Respondents provided a range of suggestions for how WRC should manage fresh water in its planning documents to give effect to the NPSFM, including:

- Links to the WRC stormwater guidelines/rule for all new development
- Avoid duplication of other relevant legislation
- Ensure that rules focus on the best value for money in terms of investment and that each site is different and a "one sized fits all approach" is not appropriate – i.e. the best practicable options are provided for
- Keep in mind costs and burden on ratepayers of what may be required by new rules/requirements, can a similar outcome be achieved as less cost. Ensure that staged investment is appropriate
- Provide for reasonable mixing.

5.2.3 Waikato Mayoral Forum - meeting

Twelve people attended the Waikato Mayoral meeting including mayors and chief executive officers of the respective councils. Forum members received a presentation covering a range of projects including the freshwater policy review and draft regional coastal plan (noting that only general planning matters and matters relating to the freshwater policy review are reported here). This was then followed by a questions and answers session. Forum members were interested in what the amendments would mean for their respective councils and communities. Members queried how this work related to Three Waters, particularly with regard to the respective roles of the new Freshwater Entities and territorial authorities in applying for water. Members requested that a link be provided between growth planning for communities and water that is being applied for. A request for WRC to engage with them and the new water entity when it comes into effect was raised by members.

Potential implications of Te Mana o te Wai were discussed, including concerns that it will lead to further stringency and challenges for communities in an already challenging environment. Questions were raised with regard to how existing water issues are going to be addressed under this new framework. Clear messaging to ensure that the public understood the technical aspects of any new requirements, and to avoid confusion with the concurrent review of Te Ture Whaimana, was discussed.

Participants raised potential inconsistencies between the NPSFM and NPSUD and provisions for medium density. The Vision and Strategy is currently under review and there was question about the impact of the review in regard to the freshwater policy review. Concern was also raised with regard to the resource management reform, and members questioned whether WRC should halt the process until the reform has been completed.
With regard to existing policy, some members felt as though Variation 6 and water allocation had not worked for them and their communities and were keen to have conversations direct with the project team to understand how these could be addressed.

Members highlighted that the region's water bodies are critical to the district entities and the work that WRC is undertaking needs to reinforce this.

Engaging with Auckland about their future needs was mentioned as another important part of the 'Waikato puzzle'. Several other matters were raised, including the amount of money spent on PC1, ensuring that the new councillors understand the importance of the project to the region, water metering requirements, and whether it was possible to separate the water quality and quantity aspects of the plan change.

5.2.4 Waikato Chief Executives Forum – Territorial Authorities

A total of 10 Chief Executives from Territorial Authorities in the Waikato attended the Forum. Waikato Chief Executives Forum members received a presentation covering a range of projects including the freshwater policy review. This was then followed by a questions and answers session.

All attendees were interested in what the amendments would mean for their respective councils and communities and a number of matters were raised by members. There was concern that for their communities it would get more stringent and challenging in an already challenging environment. A suggestion was to maybe undertake some case studies, appreciating not only Te Mana o Te Wai, but also the impacts and implications for communities.

The impact, inconsistencies and crossover of other national and regional planning documents was mentioned. For instance potential inconsistencies between the NPSFM and NPSUD and provisions for medium density. The Vision and Strategy is currently under review and there was question about the impact of the review in regard to the freshwater policy review. The impact of Te Mana o Te Wai and the new policy response to NPSFM on existing consent holders was also raised, whether consents would still hold and what transitional arrangements would need to be put in place.

With regard to existing policy, some of the Chief Executives felt as though Variation 6[7] and water allocation had not worked for them and their communities and were keen to have conversations direct with the project team to understand how these could be addressed.

It was raised that water was already an issue and questioned how this would be addressed. Engaging with Auckland about their future needs was mentioned as another important part of the 'Waikato puzzle'.

It was noted that urban drainage issues would become more pronounced in respect of gaps in technical knowledge and skills (planning, consenting and monitoring) as people move to the new entity from councils. It was thought there would be a disjoint between the entity and what is needed for communities and questioned how this would be addressed and the role of WRC.

A final comment was the need to make sure that in response to Te Mana o Te Wai that there was equity amongst the urban and rural communities, and that everyone needed to play their part.

5.2.5 Future Proof – online meeting

Ten people attended the Future Proof meeting where the group received a presentation via Microsoft Teams on the Freshwater Policy Review followed by a questions and answers session. Time was limited due to a full agenda on the day and therefore the only feedback received was on the presentation itself with one participant noting that it did not reflect Te Ture Whaimana more strongly as a higher priority and that this should be a key point of reference.

[7] Chapter 3.3 Water Takes and Chapter 3.4 Efficient Use of Water chapters of the Regional Plan

5.3 Other

5.3.1 Advisory Committee for the Regional Environment (ACRE) - meeting

Six members attended the ACRE meeting where the committee received a presentation on the Freshwater Policy Review followed by a questions and answers session.

Committee members discussed a range of topics such as wanting to know the differences between the NPSFM and Plan Change 1 processes, engaging with iwi and what's happening on the ground, access challenges and opportunities for site visits. There was comment on how it would be useful for the public to know the difference between Plan Change 1 and new obligations under the NPSFM and the hierarchy of obligations. Questions were also asked about minimum standards and national bottom lines within the NPSFM. With regard to the PC1 process at the end there was mention of how it was felt that it was heavily weighted to industry, and it became less and less accessible to the community voice and there was support from ACRE to improve the process.

One of the members spoke of how they have kaitiaki that work within a Māori framework. They spoke of whenua values. Wanting to grow kai and swimming in the awa were important and spoke about establishing their mauri and wellbeing of the awa. An opportunity for WRC to undertake site visits of where planting had been done was also offered.

One committee member hoped that the policy review process would help with access challenges to the Waikato river. This was particularly in regard to undertaking expeditions on the waka from a specific site and having to talk to the local council to gain access.

5.3.2 Combined sector workshop

There were 59 people who joined an online facilitated workshop including people from the fertiliser industry, nutrient supplier, water bottling, vegetable grower, deer industry, equine, Beef+Lamb, forestry, farming, agriculture consultant, central government, ecologist, valuation and mixed sector. The combined sector group received a presentation on the Freshwater Policy Review followed by a session seeking their feedback on three areas of freshwater management. These areas included 1) the challenges their sector face, 2) work they are doing to halt degradation and improve freshwater, and 3) ideas on how we should give effect to the NPSFM in planning documents. Various sectors/industries were identified by participants in the workshop and these categories have been used where relevant in reporting their feedback.

Challenges

A range of challenges were mentioned by the sectors participants in respect to their particular sector/industry/agency.

Fertiliser industry

Feedback from the fertiliser industry included making good policy decisions that extended beyond short political horizons - how far and how fast. Joining different stakeholders' aspirations and agreeing on realistic timeframes for achievement recognising that everybody has a part to play. Enabling meaningful participation throughout the process and recognising that every region is addressing these issues concurrently. Also mentioned was retaining staff to support extension and farm practice change as well as having an economic base.

Nutrient supplier

It was shared by the nutrient supplier that research involved long term investment and 5-10 years to create something market ready. There was a need to have some certainty to make investments feasible e.g. which nutrients, what targets etc, and certainty to make infrastructure investments for 10-20 year timeframes.

Water bottling plant
Feedback from the water bottling sector included the need for more research. Suggestions included the need to assess the impact of environmental events such as earthquakes on water quality and safety, the ability to conduct hydrological studies, and having available experts to conduct this research. Also mentioned was food defence, and potential threat (e.g. from any malicious activities) and that a full threat analysis was required with preventative measures put in place. Effective monitoring and verification was also suggested.

Local government
A key challenge noted by the local government participant/s was the amount of work to be undertaken in the midst of central government resource management reform. The view was that doing everything that is asked of Local Government in the timeframe required might not give rise to the best conversations. Bringing everyone along on the journey and making a complex conversation as easy as possible was a challenge.

Vegetable grower
The challenge identified by the vegetable grower participant/s was the extent of change required that would impact the ability of growers to grow food all year around.

Deer industry
Various challenges mentioned by the deer industry included land use and land use change, sediment from hill country, nitrogen from intensive land use, and an increase in carbon farming with associated episodic risks of large pulses of sediment around harvest time or storm events.

Farmer (Equine)
The challenge noted by the equine sector was communicating concisely with the people on the ground without it being too overwhelming when action needed to be taken.

Beef + Lamb
Feedback from Beef+Lamb included the uncertainty where things were going to land, and how it would be implemented.

Forestry
The forestry sector challenges included climate change and impacts of atmospheric river weather events in areas of fragile soils such as Coromandel, and similarly to other primary industry concerns that targets needed to be correct based on science.

Farming/Environmental manager
Feedback from the farming environmental manager participant included conveying the challenge of improvement timelines, WRC / Farm Environment Plan professionals' capacity to regulate, equity between land users, and choosing the ‘best bang for your buck’ to make the most impactful improvements. Another challenge was ensuring that practicality was considered in terms of implementing management especially around land use change.

Agricultural Consultant (Environmental)
The challenge noted by the agricultural consultant was getting the whole community to understand Te Mana O te Wai and that the health of the water takes precedence above all else ‘existing use rights were not a justification for continuing current activities’. The view was that everyone would have to compromise if the health of freshwater was not permitted to be compromised.

Rural Valuation
Feedback from participant/s involved in rural valuations included fair allocation of water resources, and capacity of council to implement manage and maintain/police the policies.

Ecologist
Key challenges noted by the ecologist included pest fish management, degradation of water from biological aspects (pest plants), monitoring and compliance and assessment of ongoing works.

Mixed group
A key challenge raised by a mixed group of sectors was the complexity of various regulations and policies to contend with and RM reform. There were comments about undertaking a review against ever changing national policy, the challenge of working through each step of the National Objectives Framework with communities in the timeframe required, and creating simplicity and efficiency in the rules. Also mentioned were site and industry specific regulations and how the policy was going to be bought into current policy and regulations. There was a question about how allocation was going to fit and other challenges about managing land use, and identifying features and values identified by the NPSFM, and having reliable data. There was also feedback about considering the long term goals with climate change impacts built in as targets, flows etc. The view was that these may change in 20 years and the outcomes may not be met due to this change.

Work currently undertaken to halt degradation and improve freshwater

A range of actions were mentioned by the sector participants in respect of their particular sector/industry/agency.

Fertiliser industry
Feedback from the fertiliser industry participant/s included supporting farmers to meet regulations and where rules did not yet apply, encourage adoption of Good Management Practice through robust Farm Environment Plans. Another action was sponsoring Farm Environment Awards. It was shared that farming/growing is complex and seeing farmers/growers who can juggle all the business and social and environmental aspects was compelling, 'for many it is seeing in the real world the how do [what] we do it'. There was mention of building sustainability extension staff as a resource farmers/growers can use. Investment in research and technologies were other actions identified such as having the $25m Sustainable Food and Fibre Futures research programme to create widgets and technologies and extension methods to provide tools to manage within limits e.g. new fertilisers, soils test. There was also mention of a research demonstration farm ('owl farm[8]') showing different practices and changes and allowing ideas to be tested in a system context.

Farming
It was shared by a farming participant that farmers have been fencing and planting waterways to keep stock out and reduce erosion. Other actions included utilising and implementing Farm Environment Plans to manage higher risks to waterways, farming with Good Management Practices and considering beyond Good Management Practices where appropriate to meet targets, and the use of integrated farm plans to create simple holistic management on farm/business. There was also consideration of current land use and stocking policies as well as open farm days that highlighted current practices, and forum for ongoing discussions/education.

Farmer (Equine)
Actions noted by the equine sector included riparian planting (natives) and fencing livestock away from the riverbanks.

Beef + Lamb
Key actions noted by the Beef+Lamb participant/s included fencing waterways and riparian planting, running workshops on farm planning, and supporting farmers along the journey of how to manage their environment.

[8] St Peter's School Cambridge

Deer Industry
Feedback from the deer industry included having well established Good Management Practices and support services to assist deer farmers in identifying risks and appropriate Good Management Practices as part of planning (Farm Environment Plans). Also mentioned was having ongoing dialogue with WRC and other regulators as to what works for deer farming and good water quality outcomes. It was also noted that as part of the Deer Industry Environment Awards, the supreme winner in 2017 was from the Waikato.

Forestry
Key actions noted by the forestry sector participant/s included the of timing of land clearing, harvest operations to suit proximity to waterways and/or managing site specific aspects as appropriate for forecasted weather, an increase in native replanting to increase riparian setbacks, adjusting construction in infrastructure to new storm expectation, retiring some areas adjacent to waterways as riparian and implementing sediment control processes where soil disturbance works are occurring.

Grower
Key actions identified by a grower included the effective use of silt traps, precision application of fertiliser, planting of steep land and gullies to create buffers to waterways, utilising industry best practice, and using cover crops to minimise sediment loss.

Agricultural Consultant (Environmental)
Feedback noted by the agricultural consultant included the provision of on-going informal education with farmers 'getting them to see the landscape through a different lens' and improving their understanding.

Ecologist
Key actions highlighted by the ecologist included freshwater ecology assessments and recommendations to include enhancement opportunities. Implementation of policy as a practitioner in providing advice on the delineation, assessment, and restoration of wetlands and water bodies and working with policy development on best practice methods and approaches to Three Waters reform.

Central Government
Feedback from the central government participant/s included funding projects through Jobs for Nature and having organisational standards and guidelines for best practice in achieving improved environmental outcomes.

Mixed group
Other feedback raised by a mixed group of sectors included the establishment of catchment groups in understanding how improvements can be made and utilising a collaborative approach.

Ideas on how WRC should manage freshwater and give effect to the NPSFM in their planning documents

The group provided a range of ideas on how WRC should manage freshwater and give effect to the NPSFM in their planning documents. These have been grouped in terms of the relevant sector/industry.

Farming
Farming sector feedback included adopting a risk-based approach as opposed to a reductionist approach. In practice, this would involve identifying and mitigating risks on farm, rather than through blanket reductions.

Farming/environmental
Ideas from the farming/environmental sector included consideration of management on a farm scale, and the wider catchment. They supported integrated farm plans to reduce the need for multiple documents. They also highlighted the need to consider all farming types and interests within each FMU and adopt practical provisions.

Deer industry
Ideas from the deer industry participant included establishing rules that provide land managers with flexibility to manage risks and work toward outcomes. The participant did not want a tick box exercise for Freshwater Farm Plans and requested that these are not detached from wider farm plan components (e.g., biodiversity, greenhouse gases, soil conservation and animal health).

Forest engineer
Feedback from the forest engineer participant included compliance monitoring and homogeneity across all industry types. The 'right land use, right place' approach was also highlighted as well as riparian planting along certain high value waterbodies.

Forestry
Ideas from the forestry sector included involving rural land users in developing solutions through communication and collaboration and ensuring a level playing field.

Beef + Lamb
Beef+Lamb highlighted the importance of setting values for each FMU, and the need for strong representation and engagement during this process.

Grower
The grower acknowledged that there are no 'silver bullets'. They highlighted that sustainability is key and a balanced approach is needed. They also raised concerns with regard to increased regulatory requirements on food affordability, and social and economic wellbeing.

Fertiliser industry
The fertiliser industry participant/s supported integrated farm plans to avoid duplication and allow for forward planning. Monitoring, compliance and ongoing community input, public awareness and certainty were highlighted as important considerations. Allowing experts to use knowledge in required areas was also mentioned.

Mixed group
The mixed group of sectors highlighted the importance of transparency for landowners and the sharing of information.

Consultant planner
The consultant planner ideas included providing some recognised solutions and standards to meet as a permitted activity for water quality.

Miscellaneous
Other feedback from participants included signalling changes beyond the life of the plan, considering the use of independent hearing panel members, equity between land uses and prioritising higher risk areas and issues. Avoiding the need for duplication of farm plans and data for different industries and businesses was also mentioned.

5.3.3 Combined Waikato Regional Forum - online meeting

Twenty people attended the Combined Waikato Regional Forum meeting where the group received a presentation via Microsoft Teams on the Freshwater Policy Review followed by a questions and answers session. Attendees to the online meeting included district and city council staff, Waikato-Tainui staff, Waikato DHB staff, Ministry for the Environment staff and

others. Two key points were raised in discussions: one of engaging with tangata whenua and the other of understanding how giving effect to Te Ture Whaimana and the local expressions of Te Mana o te Awa (Waikato-Tainui Settlement), Te Mana o te Wai (Upper River Arrangements) and Te Mana tuku iho o Waiwaia (Maniapoto Waipa River Settlement) were already giving effect to Te Mana o te Wai (NPSFM).

Comment was made that Te Mana o te Wai was likely based on the work of the local river settlements going through in 2008 to 2010 and through the land and water forum discussions. The view was that Te Mana o te Wai was generally based on Te Mana o te Awa and that Te Mana o te Wai was expressed by Raukawa, Tuwharetoa and other iwi.

5.3.4 Open webinar – online meeting

Twenty-two people attended the webinar where the group received a presentation via Microsoft Teams on the Freshwater Policy Review followed by a questions and answers session. Attendees included district and regional councillors, fruit and vegetable stakeholders, environmental organisation staff, Landcare staff and others.

A range of questions were raised by attendees including how the Freshwater Policy Review project ties in with the NPSFM and whether this fits under the RMA which is under review, the proposal for stock setbacks from waterways and whether this is different to PC1, and how do bores and water tanks fit into the freshwater policy review. Other questions raised included what is happening to save or rebuild swamps, comments on peat drying out and the effects of climate change, as well as questions regarding science, measurements and data regarding the waterways. Another raised non-compliance with permitted activity of afforestation becoming an issue for our waterways and how will WRC be apportioning more budget to monitoring.

5.3.5 Energy

Online feedback via EngagementHQ was received from Mercury NZ covering five areas of freshwater management. These areas included feedback on 1) their priorities, 2) the challenges facing their sector, 3) the work they are doing to halt degradation and improve freshwater, 4) what else should be done, and 5) suggestions on how WRC should manage freshwater in its planning documents to give effect to the NPSFM.

An important priority for those in the energy sector is ensuring the availability of water continues to address the challenge/issue around the derogation of water from other users. It is explained that this priority will ensure that water is available for other non-consumptive uses, as well as fisheries management and river/lake edge restoration activities.

When asked what the freshwater challenges or issues are facing their sector or industry, those from the energy sector noted derogation of water from other users (both abstractive users and contaminant dischargers) where the water is critical to NZ for renewable electricity generation purposes, including for the transition to decarbonise NZ's emissions.

When asked what work the sector is doing to halt degradation and improve freshwater, the respondent from the energy sector said that information is being gathered to improve the science to better understand the drivers for water quality degradation. It is explained that this will ensure that future efforts are directed to the right areas where the greatest gains will be made.

In reference to what else should be done, the respondent noted that there is a need to give greater recognition to water diverted via the Tongariro Power Scheme, stating that this comprises up to 20% of the water in the Waikato River. They noted that if this was not allowed to continue, they considered it would have significant and detrimental consequences for freshwater management in the catchment.

The responded reiterated their responses to other questions when providing suggestions on how WRC should manage freshwater in its planning documents to give effect to the NPSFM.

5.3.6 Recreational group

One online response was received from an individual from the recreational industry/sector via EngagementHQ. Feedback covered five areas of freshwater management including feedback on 1) the challenges facing their sector, 2) their priorities, 3) the work they are doing to halt degradation and improve freshwater, 4) what else should be done, and 5) suggestions on how WRC should manage freshwater in its planning documents to give effect to the NPSFM.

Key freshwater challenges or issues facing the recreational industry include run off and lost access.

Access to fishable water was identified as a priority for freshwater management by the respondent.

Working with Fish and Game was identified as the work their industry is involved in halting degradation and improving freshwater.

When asked what else should be done to improve freshwater, the respondent suggested there should be more involvement with local people and for WRC to work with Fish and Game to manage freshwater in its planning documents to give effect to the NPSFM.

5.3.7 Water Users Liaison Forum – online facilitated workshop

Thirty-four members of the Water Users Liaison Forum joined a facilitated workshop online including District Council staff and Iwi Trust Board and Iwi and representatives from sectors including horticulture, energy, dairy, dairy goat, Federated Farmers, dairy factories, forestry, and manufacturing/production companies. The Water Users Liaison Forum (WULF) received a presentation on the Freshwater Policy Review followed by a workshop asking their feedback on three areas of freshwater management. These areas included 1) feedback on the challenges facing their sector, 2) work they are doing to halt degradation and improve freshwater, and 3) ideas on how to give effect to the NPSFM in planning documents.

A range of challenges were identified by the water sector. A common theme was the complexity of various regulations and policies to contend with and reforms to the New Zealand resource management system (RM reform). There were comments about competing policy directions (National Policy Statement for Urban Development (NPSUD) versus NPSFM), having to keep up with national and regional water reform, the costs involved, and planning investment in mitigations and action plans when there is uncertainty in regulations. There were comments about current allocation and how this needed to change to a more merit-based system. There were mentions of moving away from the 'first in first served approach' to allocation, that it was not based on merit and that regulation needed to enable a more efficient and equitable system. Managing climate change impacts and the effects on the sector were a concern such as higher water temperatures, flood control and an increase in droughts and flooding. There was mention of the need to explore water alternative options e.g., water storage and all other options to acquire water for the future. For instance, in times of high flows finding ways to store water or looking at alternative options of not using natural water resources. Supply and demand were noted as a challenge and planning for future growth needs. Managing and balancing competing priorities for everyone was another challenge. This included managing the conflicts between competing water users while having an appreciation and respect for each other's perspectives. Other challenges identified were high growth intensification, declining water quality, that action was key as time is running out, and finding ways to work together to achieve the goals.

Another challenge identified was the lack of resource and capacity for iwi to participate in the process. This included the capacity and resourcing of iwi/mana whenua in resource management issue processes at all levels.

The WULF identified several actions they are doing to halt degradation and improve freshwater. A common theme was providing education and communication in the sector/community. This included water user group education on sector best practice standards, community education, and communication with farmers about the requirements and good practice. Utilising industry-based programmes of best practice was mentioned such as workshopping with farmers and the development of farm environment plans, the 'lead with pride' industry programme and the Kiwifruit Industry Water Strategy and nutrient reduction programme. Monitoring and compliance was also mentioned as a common theme. Utilising and applying a catchment-based approach such as integrated catchment management planning and supporting catchment restoration groups and the Waikato Catchment Ecological Enhancement Trust. Working or partnering with others to collectively work towards achieving freshwater goals was also noted as a current action as well as utilising technology, research and innovation. Examples included research to gain a better understanding of discharges within the system and mitigation mechanisms, use of 'Overseer' modelling, and piloting real-time water quality sensors. Utilising Māori indigenous concepts in freshwater management was noted including habitat and pā for mahinga kai species, creation of the mātauranga Raukawa freshwater monitoring tool, utilising mātauranga Māori concepts, building rangatahi capability and capacity – Kahui Ako and exploring the use of other indigenous tools. In reference to wastewater actions there were mentions of alternative options for wastewater disposal and wastewater treatment upgrades. Other actions included future planning, involvement in restoration projects, riparian planting, engaging with council and advocating to central government to understand the challenges for the sector, looking at ways to reduce water take, decrease discharge volumes, better knowledge and understanding behind environmental interventions and learning from others.

The group provided a range of ideas on how WRC should give effect to the NPSFM in their planning documents. These included:

- Giving effect to Te Mana o te Wai in an integrated and collaborative way that the public understands, and placing Te Ture Whaimana at the forefront. There was also discussion around Te Mauri o te Awa setting precedence over Te Mana o te Wai.
- Providing clarity on how to co-design outcomes for mauri restoration and achieve desired outcomes for Te Ao Māori.
- Seeking opportunities to elevate the status of iwi environmental plans within the RMA.
- Including water quantity as well as quality.
- Ensuring there is a robust science and evidence base and clarity around values and targets. Targets should be reflective of the local and regional context.
- Recognising, and aligning with, future legislative reforms and other national strategies (e.g., decarbonisation and adaptation).
- Providing stronger and more effective compliance monitoring.
- Additional tools to encourage local community solutions, alternative water options, water storage and reuse, and to reduce discharges.
- Industry specific provisions / requirements, and alignment with sector best practice guidelines.
- Recognising existing investment and positive activities (including lifeline utilities and essential services) and enabling flexibility around approaches to addressing improvements. Providing long-term direction.
- Aligning between RMA and Local Government Act (LGA) funding and implementation cycles.
- Limiting consent durations and developing a water accounting framework.

6 Conclusion

The community and sector engagement meetings showed high levels of interest in Te Mana o te Wai and support for Te Ture Whaimana. Awareness of actions already being undertaken to improve water quality were discussed, together with recognition of new actions that can be introduced. A range of views were discussed on what activities need to be regulated to manage freshwater in the region, these included suggestions about the following activity types and management tools: farm plans, farming land use change, discharges to water, contaminated land, stock exclusion, the take and use of water, intensive winter grazing, earthworks, vegetation clearance, agrichemicals, stock exclusion, and wetlands.

Support for existing regulation and monitoring was evident, while recognising the need for additional science and a combined effort by people reconnecting to achieve a common vision and raising awareness about the importance of freshwater. The communities can progress this by taking pride in what has already been achieved, promoting the importance of freshwater management by telling their success stories and continuing to build relationships with iwi and Council, and involving young people in the journey.

7 Appendices

Appendix 1: Round 1 Community and Sector Engagement Events

Table 1: Location, date, time and attendee numbers at the Round 1 one-day water workshop with communities

Town	*Location*	*Date*	*Time*	*Number of attendees*
Raglan/Whaingaroa	Union Church Hall	20 May 2022	9.30am-3pm	19
Taupō	Great Lake Centre	27 May 2022	9.30am-3pm	21
Te Kuiti	Les Munro Centre	2 June 2022	9.30am-3pm	20
Tokoroa	South Waikato Sports and Events Centre	15 June 2022	9.30am-3pm	11
Hamilton	The Link	17 June 2022	9.30am-3pm	21
Tuakau	Tuakau Memorial Hall	21 June 2022	9.30am-3pm	13
Kāwhia	Kāwhia Community Hall	29 June 2022	10am-3pm	15
Whitianga	Whitianga Town Hall	1 July 2022	9.30am-3pm	13
Paeroa	Paeroa War Memorial Hall	4 July 2022	9.30am-3pm	20

Table 2: Round 1 Matamata Event - Location, date, time and attendee numbers

Town	*Location*	*Date*	*Time*	*Number of attendees*
Matamata	Matamata Piako District Council	20 July 2022	12pm-2pm	19

Table 3: Round 1 sector, stakeholder, existing groups and forum, date, time and type of engagement presentations and workshops, online/written feedback

	Date	*Participant numbers*[9]	*Presentation/workshop/online written feedback*
Primary sector			
Arable Sector Group meeting	25 May 2022	11	Presentation/workshop
Dairy sector: - Dairy Sector Group meeting - other	2 June 2022 -	16 4	Presentation/workshop Online/written feedback
Drystock sector: - Drystock Sector Group meeting - other	29 June 2022 -	10 3	Presentation/Q&A Online feedback
Forestry Industry Liaison Forum	12 May 2022	16	Presentation/Q&A
Fruit and vegetables	-	6	Online/written feedback
Kiwifruit	-	1	Written feedback

[9] Excludes staff numbers

Pork	-	1	Online feedback
Rural advocacy - irrigation	-	1	Online feedback
Territorial authorities			
Territorial Authorities: - session - other	 5 July 2022 -	 15 2	 Presentation/workshop Online feedback
Waikato Mayoral Forum	11 July 2022	12	Presentation/Q&A
Waikato Chief Executives Forum – Territorial Authorities	1 July 2022	10	Presentation/Q&A
Future Proof	20 May 2022	10	Presentation/Q&A
Other			
Advisory Committee for the Regional Environment (ACRE)	6 April 2022	6	Presentation/Q&A
Combined sector workshop	15 July 2022	59	Presentation/workshop
Combined Waikato Regional Forum	24 May 2022	20	Presentation/Q&A
Open webinar	25 July 2022	22	Presentation/Q&A
Energy	-	1	Online feedback
Recreational group	-	1	Online feedback
Water User's Liaison Forum	16 May 2022	34	Presentation/workshop

Appendix 2: Feedback form – community

I am filling out this form:

- □ To answer questions about what's important to me about fresh water in my area
- □ To answer questions about what's important about fresh water to my industry or sector

Area/FMU

Which area of the Waikato region are you completing this survey for?

- □ Coromandel
- □ Hauraki
- □ Taupō
- □ Waikato/Waipā
- □ West Coast

Freshwater activities

- What activities do you do on or in freshwater bodies?
- Where do you do these activities?

Freshwater values

We are required to consider specific freshwater values which are listed below. Please identify which of these apply to the freshwater body in your area.

Ecosystem Health (Water quality, water quantity, habitat, aquatic life, ecological processes)

☐ Yes ☐ No ☐ I don't know

(if yes above) Please name the specific waterbody or area and explain why this value is important.

Human Contact

☐ Yes ☐ No ☐ I don't know

(if yes above) Please name the specific waterbody or area and explain why this value is important.

Threatened Species

☐ Yes ☐ No ☐ I don't know

(if yes above) Please name the specific waterbody or area and explain why this value is important.

Mahinga Kai / Hauanga kai (Food safe to harvest, customary resources available)

☐ Yes ☐ No ☐ I don't know

(if yes above) Please name the specific waterbody or area and explain why this value is important.

Natural form and character

☐ Yes ☐ No ☐ I don't know

(if yes above) Please name the specific waterbody or area and explain why this value is important.

Drinking water supply and animal drinking water

☐ Yes ☐ No ☐ I don't know

(if yes above) Please name the specific waterbody or area and explain why this value is important.

Wai tapu (sites of special significance including rituals and ceremonies)

☐ Yes ☐ No ☐ I don't know

(if yes above) Please name the specific waterbody or area and explain why this value is important.

Transport and tauranga waka (Places to launch and land water craft)

☐ Yes ☐ No ☐ I don't know

(if yes above) Please name the specific waterbody or area and explain why this value is important.

Fishing

☐ Yes ☐ No ☐ I don't know

(if yes above) Please name the specific waterbody or area and explain why this value is important.

Hydro-electric power generation

☐ Yes ☐ No ☐ I don't know

(if yes above) Please name the specific waterbody or area and explain why this value is important.

Irrigation, cultivation and production of food and beverages

☐ Yes ☐ No ☐ I don't know

(if yes above) Please name the specific waterbody or area and explain why this value is important.

Commercial and industrial use

☐ Yes ☐ No ☐ I don't know

(if yes above) Please name the specific waterbody or area and explain why this value is important.

Attributes and targets

- What are you happy about regarding the current state and management of rivers, lakes, wetlands, groundwater and other waterways in your area that you want to retain?
- What concerns you about the current state and management of rivers, lakes, wetlands, groundwater and other waterways in your area?
- If you have a particular concern, please name the waterbody or area it applies.

Long term visions

- What would you want the rivers, lakes, wetlands, groundwater and other waterways in your area to be like in ten years time?
- What would you want the rivers, lakes, wetlands, groundwater and other waterways in your area to be like longer term?
- In response to the above question, what would be a reasonable but ambitious timeframe to achieve this?

Current and future actions

- What actions or activities do you know of that's currently being done to manage or improve freshwater in your area?
- What other actions in your area would further improve these rivers, lakes, wetlands, groundwater and other waterways in your area?

Limits and rules

- What additional rules do you think would improve the state of fresh water in your area?

Other thoughts

- What else would you like to say about freshwater management in your area?
- Any other comments you would like to share with us?

Demographic data

- Your name
- Your email
- Where in the Waikato region do you live?
- What is your occupation?
- What is your age range?
    - 18-34 years
    - 35-49 years
    - 50-64 years
    - 65+ years
    - Prefer not to specify
- Are you filling out this form on behalf on an organisation?
- Please name the organisation here

Appendix 3: Feedback form – Sector/industry

I am filling out this form:

- □ To answer questions about what's important to me about fresh water in my area
- □ To answer questions about what's important about fresh water to my industry or sector

- What sector or industry are you involved with?
    - □ Dairy
    - □ Drystock
    - □ Energy
    - □ Horticulture
    - □ Local government/territorial authorities
    - □ Pork
    - □ Recreational group
    - □ Rural advocacy
    - □ Rural professionals
    - □ Other
- What are the freshwater challenges or issues facing your sector or industry?
- What are your sector or industry priorities for freshwater management?
- What is your sector or industry already doing to halt degradation and improve freshwater in the Waikato?
- What else should be done?
- What suggestions does your sector or industry have about how the council should manage fresh water in its planning documents to give effect to the National Policy Statement for Freshwater Management 2020 (NPS-FM)?

Demographic data

- Your name
- Your email
- Where in the Waikato region do you live?
- What is your occupation?
- What is your age range?
    - 18-34 years
    - 35-49 years
    - 50-64 years
    - 65+ years
    - Prefer not to specify
- Are you filling out this form on behalf on an organisation?
- Please name the organisation here

Appendix 4: Interactive map – pin descriptors

- Activities in the water: Mahinga kai / hauanga kai, fishing, swimming and other contact recreation (describe the sort of activity)
- Activities beside the water: walking, camping, sightseeing and other non-contact recreational water activities (describe the sort of activity)
- Activities on the water: boating, waka, kayaking, rafting (describe the sort of activity)
- Plants and animals that live in or near water, including threatened species (describe what these species are)
- Habitat and ecosystems (describe what should be protected, maintained or improved)
- Natural character (what's unique about this area)
- Special sites and features (describe freshwater sites and features that are special to you and why)
- Water quality (describe what needs to be protected, maintained or improved)
- Water take/use (describe what is important to you about water take and use)
- Something else (describe anything else that's important to you about freshwater)

Appendix 5: Bus stop questions for each station

Bus stop 1 – Special sites and features

- What local freshwater sites and features are special to you, and why?
- What kinds of recreation or activities do you do on or in the water?
- Are there freshwater places you no longer use due to water quality?
- Are there places you would like to use if water quality was better?

Bus stop 2 – Values and outcomes

- What is important to you about these four national values?
- What is important to you about these freshwater values?
- What else do you value about freshwater in your area?

Bus stop 3 – Attributes and targets (Current state of freshwater and desired state)

- What are you happy about regarding the current state of your waterways, that you want to retain?
- What concerns you about the current state of your waterways?
- What state would you want to achieve in your local freshwater?
- In what timeframe would you like this achieved?

Bus stop 4 - Actions and action plans (current or suggested for future)

- What actions or activities are already being done to improve freshwater in your area?
- What other actions can we do in our catchments to improve freshwater in your area?

Bus stop 5 – Limits and rules

- How effective are these current rules?
- What else would you suggest?
- What should be put in place when this rule expires to manage the same issues?