# **REGIONAL FORUM**

People Water and Land - Te Mana o te Tangata, te Wai, te Whenua

# Report 1 (August 2020)

# Phase Two Report to Environment Southland and Te Ao Marama Incorporated Board

# Purpose

This report to Environment Southland and Te Ao Marama Incorporated Board:

- reviews the first year of work by the Regional Forum;
- provides a commentary on the Southland Murihiku collective values and draft freshwater objectives and the challenge before us;
- makes prioritised recommendations for immediate practical actions to improve water quality and/or help inform the decisions ahead.

# Summary

The community-based Regional Forum was established by Environment Southland (Council) and Te Ao Marama Incorporated Board (Te Ao Marama Inc) to consider and advise on the options available to achieve the community's values and objectives for freshwater by considering the impacts, timing, targets, limits (e.g. for water quality and quantity), methods and policy context. Over the past 16 months the Forum has met at locations around the region to share knowledge, learn from members of the community, mana whenua and technical experts, to appreciate the values Southlanders have for freshwater, and to gain an understanding of what the draft freshwater objectives are likely to look like for Southland.

This paper captures our reflections on this, the preliminary work on the gap between the current state of our waterbodies and the draft freshwater objectives, and the challenge ahead. The preliminary work shows that many sites in Southland meet the draft freshwater objectives for some attributes, but a substantial number do not and the cumulative impact down catchment is clear. The Southland Murihiku values, draft freshwater objectives, and the gap between the current state of our waterbodies and the draft freshwater objectives, will be finalised and shared with the community later in 2020 (the Values and Objectives package).

In the interim, the forum recognises there is a pressing opportunity to get some work underway through Environment Southland's current Long-term Plan process and funding cycle to improve our water and/or help inform the decisions ahead. In this light, the Forum presents three recommendations to Council and Te Ao Marama Inc to consider as part of the Long-term Plan process in 2020.

These recommendations centre on strengthening the foundations for the community to work together to share knowledge and build capacity to meet the challenge of inspiring change across the region.

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The three recommendations are:

- **Priority One**: Scope and design a collective values-led hauora approach and framework for integrated catchment management.
- Priority Two: Development and maintenance of a curated and current web-based information portal providing a trusted "one-stop shop" for information, advice, and resources that will support enhanced decision-making and increased uptake of mitigation measures known to be effective within Southland catchments.
- **Priority Three**: Review and streamline selected consents and compliance processes where positive action is to be encouraged and facilitated. Map, illustrate, and publicly share the refined consents and compliance processes.

The Forum welcomes discussion and consideration of these recommendations. We look forward to the next phase of our work, to consider how to meet the freshwater objectives for Southland by considering the impacts and timing of options available to our region.

# Background

The Regional Forum was established in April 2019 to advise the Southland Regional Council and Te Ao Marama Inc (TAMI) on how to achieve the community's aspirations for freshwater as part of Te Mana o te Tangata, Te Wai, Te Whenua - the People, Water and Land Programme. The Forum is made up of 15 members of the community who have a cross-section of interests, knowledge, and is reflective of the Southland community. Each member is present in their individual capacity working for the benefit of the whole community, rather than representing any interest or industry group, or any one particular area of the region. Fiona Smith is the Regional Forum Chair and Phil Morrison is the Deputy Chair. The other members are Mata Cherrington, David Diprose, Kelsi Hayes, Bernadette Hunt, Joyce Kolk, Jade Maguire, Paul Marshall, Lisa Pearson, Estelle Pera-Leask, Ewen Pirie, Michelle Roberts, Hayden Slee and Vaughan Templeton.

The Regional Forum work has been split into three broad phases. The first phase was to develop the team and build knowledge to understand the issues facing the region. This encompassed the first four workshops, which occurred from April until July 2019. During Phase Two, the Forum received and considered the community and iwi values and draft objectives for freshwater and considered the barriers and drivers for change. Four workshops were held during Phase Two, which ran from September 2019 through until March 2020. Phase Three is where the Forum considers and advises Governance on the options available to achieve the community's values and freshwater objectives by considering the impacts, timing, targets, limits, methods and policy context. The Forum is responsible for developing a proposed package of preferred regulatory and non-regulatory methods to enable integrated management of water and land. Phase Three commences in 2020 and will go through to 2022.

I sense that we have for so long taken for granted our easy access to high quality water resources. Now, as it dawns more clearly what has been lost, the task of seeking solutions can be considered an opportunity for increased collaboration and accelerated learning. That is an exciting prospect.

- Phil

This report is being provided in advance of the Values and Objectives package, which will be shared later in 2020, so that the recommendations for immediate practical action can be considered as part of Council's current Long-term Plan process. We feel strongly there is an opportunity to get action underway to help improve our water in Southland and help inform the decisions ahead. The report incorporates our reflections on the community's values and draft objectives, the challenge ahead and the proposed approach to Phase Three of the Forum's work, as well as those immediate practical action recommendations for your consideration.

# Phase Two of the Regional Forum Process: Values and Objectives

The second phase of the Forum's work from September 2019 to March 2020, has focused on the understanding the community and iwi values and objectives for freshwater. This established a foundation for Phase Three, where we will consider the limits and methods needed to achieve these objectives.

During Phase Two we have discussed the Values and Objectives package of work produced by the Environment Southland and Te Ao Marama Inc technical team which incorporates:

- community and Iwi values;
- draft freshwater objectives;
- preliminary analysis of the current state and comparison to the draft freshwater objectives.

Ngai Tahu ki Murihiku shared their values with us and explored key concepts such as te mana o te wai, mahinga kai, hauora and ki uta ki tai. Te mana o te wai is about the integrity and status of the water, which in turn is affected by the mauri, which consists of the essential qualities necessary for the life force, ecosystem, energies and special nature of the wai. Hauora is the state necessary to positively influence the mauri o te wai.

Mahinga kai for Ngai Tahu ki Murihiku refers to interests in traditional gathering of food and other natural resources and the places where those resources are obtained. Practising mahinga kai is a very important for the cultural and economic well-being of Ngai Tahu ki Murihiku and it is essential for the ability to hand down mahinga kai tikanga from one generation to the next. There is a great cultural risk of tikanga and knowledge getting lost when mahinga kai cannot be practised.

We appreciate the intrinsic importance and how deeply woven, water is, into the very identity of Ngāi Tahu ki Murihiku as a taonga: which carries with it a non-negotiable responsibility of kaitiakitanga, to ensure that what is being passed on to future generations is in a better condition than that currently experienced by the present generation. Ngai Tahu ki Murihiku use "ki uta ki tai" to describe their holistic understanding of freshwater ecosystems

The Forum's strength is the combination of voices from different experiences and understandings. Combined we create the harmony of a shared purpose to ensure the sustainable hauora and mana of our whenua and wai for generations to come. The process of whanaungatanga has set us in good stead. It allowed us to safely explore and learn from one another as well as others so our offering will provide significant taonga to those who are charged with the responsibility of decision-making on behalf of their respective communities. Here i te whenua, here i te wai, here i te tangata.

- Mata

and how the health and well-being of the people are fundamentally linked to the natural environment.

Ki uta ki tai (from the mountains to the sea) recognises the movement of water through the landscape and the numerous interactions it may have on its journey. It acknowledges the connections between the atmosphere, surface water, groundwater, water quality and quantity, and the coast. It also acknowledges the connections between people and communities, people and the land, and people and water (Tipa et al, 2016). It is a significant connection, not just a value. Ngai Tahu ki Murihiku recognise there are indeed consequences from actions and activities that we <u>all</u> undertake throughout our daily lives.

To the broader community, water sustains their social, economic and cultural well-being. To the whole community, water represents a significant recreational and natural asset that has intrinsic values just through its existence. Other values, such as access to waterways, connection to special places near waterways, and concerns like rubbish were raised by people across the region.

These tenets were expressed to us as we spoke to people at the Forum workshops around the region and were consistent with the values conveyed to us from the 'Share your Wai' engagement process and collated information from various planning documents (that incorporated what was important to Southland communities about the region's water from previous discussions). What we heard also aligned closely with the values expressed from the Ngai Tahu ki Murihiku values collection programme.

The Forum is heartened by the strong alignment of the values expressed by the community and Ngai Tahu ki Murihiku, which will underpin the setting of freshwater objectives for Southland Murihiku. The draft freshwater objectives provide the focus of our work in Phase Three. The Forum recognises that the freshwater objectives are draft because establishing finalised freshwater objectives will require value judgements to be made concerning the preferred balance between multiple values. The Forum will prepare advice on any changes to the freshwater objectives following Phase Three when we explore the implications of the possible methods (e.g. environmental, cultural, social and economic implications) to meet the freshwater.

## The community's vision for freshwater

As Regional Forum members we have reflected on what the community has said through the 'Share your Wai' engagement, previous planning processes, the Ngai Tahu ki Murihiku values collection programme and what they have shared with us kanohi ki te kanohi (face to face).

The Forum welcomes the passion of the community and the value they place on improving our freshwater. We thank all those individuals and organisations who contributed to our understanding through the eight workshops, including those people who participated in the public sessions at Bluff, Gore, Te Anau, Invercargill, Tuatapere, Winton, Waituna and Riverton. We acknowledge the hospitality and open dialogue of the Runanga who have hosted us at Te Rau Aroha and Murihiku Marae. This interest creates a positive force for

Gathering kai the way our ancestors did and expressing our manaakitanga are critical to Ngāi Tahu ki Murihiku. Degradation of freshwater in our takiwa makes this difficult. We the 'Regional Forum' must be brave, bold and steadfast to effect positive change for 'te mana o te wai, ki uta ki tai' for us and our children after us.

- Estelle

change and we will continue to engage with the community throughout Phase Three of our work.

From our conversations with the community and the values the community has expressed through 'Share Your Wai', we have developed this community vision for freshwater to help guide our work.

"Waterways are respected and managed in an integrated way, ki uta ki tai, that enables a thriving environment, support for our native taonga species, and a healthy and prosperous community.

People understand and practice their role as kaitiaki and guardians for future generations and enjoy access to waterways for recreation and mahinga kai."

# The Challenge – Improving Southland's Freshwater

Southland's land use, both urban and rural, has changed significantly during the past 150 years. Across much of Southland drainage channels have been dug, wetlands have been drained and many rivers have been straightened or confined within stopbanks. More recently, land use has intensified with increasing demand for irrigation and other water supplies. A rich agricultural landscape has resulted and underpins Southland's economic prosperity, but this has resulted in adverse impacts to our freshwater. We have heard first-hand and observed the impact of changes down catchment from land use activities, industry and urban water use. It falls short of our aspirations for the future. We note that iwi is opposed to contaminated discharges to water overall.

The preliminary work has shown us the variance between the existing environmental state of our water bodies and the draft freshwater objectives ("gap analysis"). This analysis highlights that for the four developed Freshwater Management Units (FMUs), many sites meet the draft freshwater objectives for some attributes but a substantial number do not and the cumulative impact down catchment is clear. We note that an additional FMU, Waituna, is being considered by the Environment Court as part of the proposed Southland Water and Land Plan hearings. Whilst this FMU is not specifically discussed here, we are well placed to consider Waituna (currently in the Mataura FMU), should that be the Court's decision.

Nitrogen, phosphorus, bacteria and sediment make their way into our waterways and accumulate in our estuaries. They have become contaminants in many areas, causing a deterioration in health of our waterbodies and can pose a risk to human and animal health. The preliminary analysis indicates that these four contaminants are problematic and will contribute to difficulties to meet the draft freshwater objectives across parts of the region. The Fiordland and Islands FMU is the only FMU where the draft freshwater objectives appear to be met, reflecting its largely natural state.

The Waiau FMU is distinct for its hydrology being highly modified. Extraction of large quantities of water can reduce water levels in rivers and streams, with consequential effects on water quality as the volume of water available to dilute contaminants decreases.

The drainage of wetlands and changes in hydrology and land cover has resulted in comparatively little time for substances, such as nutrients, to attenuate before they reach

Over the last year, we have become a very solid coalition with good understanding of the wide-ranging values around freshwater. I am confident we have the ability to work through the challenges the next phase will bring, to arrive at a position that balances the community's wide-ranging interests.

- Bernadette

waterways. Alongside the decreased residence time for water which affects water levels and flows, is a reduced assimilative capacity of the land to remove contaminants. Some of Southland's estuaries have also been highly modified, like New River in Invercargill that has significant reclaimed land and contains a disused unlined landfill.

The Forum recognises that changes throughout the catchments have a cumulative effect on our downstream environments such as estuaries and coastal lagoons. It is clear that the challenge is significant and it will take an all of region approach to address Southland's freshwater issues, requiring 'whole of catchment' responses.

# **Inspiring Change**

The Regional Forum recognises the opportunity that is before the Southland community to achieve improvements to Southland's freshwater. A healthy environment supports the economic, social and cultural wellbeing of our communities. However, we are also aware that some people are being confronted by environmental challenges and this is creating a level of unease and uncertainty.

We acknowledge the number of groups and individuals that have shared information about their place, association or activities with the Regional Forum. The open and frank discussions have been appreciated and we look forward to this continuing. We acknowledge too the efforts that are being made by groups and individuals to lead, to innovate, and to support their community through change. Now is the time when this is needed more than ever.

The Forum recognises that to achieve change within catchments, freshwater management units and across our region, we must take ki uta ki tai approach. We will achieve more working together.

The Forum recognises the need to consider the health and resilience of our water, te hauora te wai, within the context of the holistic environment, including people, water, and land. The challenges we face, climate change, pollution and biodiversity loss amongst them, contain within them the impetus we need to take action and they should not be considered in isolation. The community has told us that they value water as fundamental to life and this resource will only become more precious as the climate changes. We note the need for long-term thinking and the importance of considering the co-benefits of our work.

To inform our work in Phase Three, we have considered those factors which will promote change and those barriers which will need to be overcome if the community's values and objectives for freshwater are to be achieved.

### Mo tātou, a, mo ka uri, ā muri ake nei

### For us and our children after us

The Forum notes the importance of the principles of stewardship, kaitiakitanga and te mana o te wai to guide positive change to achieve hauora and ecosystem health that will enable us to improve the environmental inheritance of our future generations. These principles relate to matauranga Māori, Te Tiriti o Waitangi – The Treaty of Waitangi and local knowledge.

Since April last year I have met and heard many opinions regarding the communities in Southland wish for the water to be looked after, now and for future generations. It makes my heart sing to know we are wanting the same thing and are all on this journey together.

- Joyce

Bringing together different perspectives and developing an understanding of these principles will be a key driver of effective change.

### Legislation, rules and regulations

Well designed and implemented central government directives, legislation and local government plans, can provide a positive framework for change. But to be most effective, change needs to be practical to implement. Rules and regulations, consenting and compliance processes all need to be implemented at an appropriate rate, be well aligned and have sufficient resources to deliver at the regional level.

An accurate understanding of the issues Southland faces is needed across the region if public calls for change and central government directives are to achieve the greatest impact. This requires technically sound, locally appropriate responses to be developed. The Forum hopes to contribute to practical regional policy over the next few years.

### Capacity building and sharing of knowledge

Knowledge sharing, collaboration, community engagement, and capacity building initiatives are already effecting change. Scientific information, presented clearly and in a form which can be used by individuals and communities to reach better decisions, will be an essential tool to guide more effective action occurring more quickly. Research and technology, together with innovations to the way we do business, all present opportunities to improve freshwater.

### **Environment and Economy**

The Forum recognises the importance of our whenua and ecosystem to provide the resources and benefits essential for human survival and economic activity. It is the 'capital' on which we build our futures. The environment and our economic, social, and cultural well-being go hand in hand. An awareness of this across our communities is important for a shared purpose, to support and enable change to improve our freshwater.

### **Resources for change**

The Forum recognises that significant resources – financial, human, knowledge and technological - will be required to effect change. Financial constraints are currently limiting the ability of some to make the investments required, whether in land systems or publicly owned infrastructure. Financial tools supporting those who are investing in change can be a useful whether it is local support for catchment level activities, or a systemic change to ways in which the financial system and markets value environmental performance. Access to knowledge is critical to enable effective change at pace.

### Working together

As individuals and as a community, the mind-set we take as we approach this challenge will be critical to set us on the path to success. We need to recognise our history without laying blame; as generally things were done with the best of intentions on the information available at the time. Rather, let us be inspired to work together to develop innovative, evidence based solutions to protect and improve our environment. Collaboration and partnerships will be essential to achieve change. The Forum echoes the many comments received from the community through the Share Your Wai process: there is shared responsibility for the state of our freshwater and shared action will be necessary to effect change.

Ki aku nei whakaaro, me whakapai tātou i te hauora o te wai 'mō tātou, ā, mō kā uri ā muri ake nei'. Nā te mea – ko au te wai, ko te wai ko au!!

- Jade

### Whatungarongaro te tangata, toitū te whenua

As man disappears from sight, the land remains.

# Approach to Phase Three

The Regional Forum has considered a draft plan for Phase Three (prepared for us by the Kaituitui team) to advise on the limits and methods (both regulatory and non-regulatory) to achieve the community's aspirations for water expressed as freshwater objectives. The plan proposes a staged approach to look first across the region, then at a catchment level and unique situations within the region.

The process allows for 'Agreement in Principle' points for Council and TAMI through the process. At these times Council and TAMI will receive interim reports that outline the Forum's conclusions and any decisions required. These points will be an opportunity for the Council and TAMI Board to provide feedback, input, and direction on the Regional Forum's process.

The Forum understands that the approach is high level and subject to change but does guide the next stage of our work.

### **Phase Three - Staged Approach**

- **Principles and constraints** The first workshops will focus on the principles which the Forum will utilise as they approach their discussions on limits and methods. Key inputs to these conversations include principles of Council and TAMI for the People, Water and Land Programme, principles from the pSWLP and principles from other processes.
- **Region-wide limits and methods** These workshops will work through the five priority system stressors (contaminants) which have been identified during the development of the Values and Objectives package *E. coli*, Nitrogen, Phosphorus, Sediment, and Environmental Flows (water quantity).
- Fresh Water Management Unit/Catchment/sub-catchment limits and methods There are both environmental and social factors which vary at catchment or sub-catchment level. These workshops will deal with specific issues which cannot be dealt with at a region-wide level and result in catchment specific approaches if and where required.
- Unique situations Special situations which sit outside the region or catchment/ sub-catchment level will be worked through either as part of, or following, the larger scale considerations. The approach will be refined and adapted as we work through the process. These may be "hot spots" where system stressors are having a particular impact or "hot times" where there is seasonal variation which needs to be dealt with.
- **Reporting wrap-up** Finalisation of the reporting package to Council, including the advisory report, review and sign off of the technical documentation including inputs to the regulatory process and consultation documentation.

The Forum recognise there will be need to test the limits and methods and how they apply and interact at the different scales. This will need to occur throughout the process.

Whilst the plan is subject to change, the Forum is comfortable with the staged approach although notes the tight timing to provide advice to Council and Te Ao Marama Inc by 2022.

- Vaughan

We need to treat our waterways as capital assets and make sure we are only spending the interest, not reducing the capital.

# Recommendations for Practical Action to Inspire Change

The Regional Forum understands its responsibility to provide advice at the end of Phase Three on how to achieve the community's aspirations for freshwater expressed as freshwater objectives. However, from the knowledge we have gained so far, we recognise there is an opportunity to get some things underway now to improve our water or help inform the decisions ahead. There is an opportunity for Council and Te Ao Marama to consider this advice as part of the long-term planning process.

The Forum developed the following criteria for putting forward advice:

- potential to inspire change in Southland's freshwater focused on major barriers/ drivers for change; areas of core challenge; influences actors with potential to make change;
- falls within Council responsibility (as opposed to central government or area of private sector responsibility);
- provides a foundation for long-term action, including through clustering with existing programmes to leverage greater impact;
- based on existing research/guidance on need/ effectiveness (with the exception of scoping studies to develop this information where it does not exist);
- feasibility ability to deliver within the existing work programme;
- for delivery in the immediate time period (pre-2025).

Following consideration of a range of ideas raised over the first year of the Forum's work, along with theories of change and criteria for considering recommendations, the Forum members workshopped several ideas for practical change.

We acknowledge the broad challenge inherent in inspiring change across the Southland region, especially the need to work together for sharing knowledge and capacity building. The Forum members believe it is important to commence certain work now in order to further strengthen the foundations for community collaboration.

Further, while the Forum members recognise there is much that could potentially be undertaken, what is recognised is the importance of prioritising choices and bringing a focus to the resulting work in order to deliver positive and enduring impact.

The Forum's primary recommendations in order of priority are:

- 1. **Priority One:** Scope and design a collective values-led hauora approach and framework for integrated catchment management.
- 2. **Priority Two:** Development and maintenance of a curated and current web-based information portal providing a trusted "one-stop shop" for information, advice and resources that will support enhanced decision-making and increased uptake of mitigation measures known to be effective within Southland catchments.
- 3. **Priority Three:** Review and streamline selected consents and compliance processes where positive action is to be encouraged and facilitated. Map, illustrate, and publicly share the refined consents and compliance processes.

These recommendations are explained in further detail below.

Having an opportunity to improve Southland's water quality in an environmentally and economically sustainable way is important. Being involved in the Regional Forum is a chance to be a part of these difficult but important discussions.

- Hayden

### **Priority One**

Scope and design a collective values-led hauora approach and framework for integrated catchment management. It is believed that a deliberate co-design approach with mana whenua, key stakeholders, and community groups would promote collaboration, knowledge sharing, increased understanding, and innovation in response to the need for an integrated ki uta ki tai approach to catchment management. It is envisaged that such a framework would be highly useful for implementation beyond 2025, incorporating partnership into all levels of Council and the community.

### Need

The importance of co-ordinated action at catchment level is now widely recognised. Also recognised is the need for mutual respect of various knowledge sets, perspectives and interests, along with the need for integration of collective values. A flexible framework, guided by collective values that can be used in different ways, supported by different groups, in different catchments will ultimately be needed.

### Outcome

A robust hauora framework for integrated catchment management plans for Council, mana whenua and community stakeholders; a framework that reflects collective values, emphasises te mana o te wai, offers flexibility in application, and supports implementation through collaborative action by different groups and stakeholders.

### Deliverable

Hauora framework to enable catchment stakeholders to create and deliver action plans - enabling a development process from values to vision to goals to actions/tools, and ultimately outcomes.

### **Suggestions for Delivery**

Scope an approach and framework that is feasible and viable for implementation at catchment level from 2025. This would be done by adopting a co-design approach, informed by collective values, drawing on insights from previous initiatives elsewhere in New Zealand and abroad. Such a framework must be user-centric in character, identifying utility and value for land managers, catchment groups, industry interests, rural and urban communities. Such a framework would have potential to leverage links with other regional and national initiatives (such as Thriving Southland, Provincial Growth Fund, or Predator Free 2050), with potential to inspire co-investment of resources (financial, knowledge, volunteer labour, data management). Features of such a framework could include potential for citizen science projects, along with standardization of data management, ecosystem health monitoring, and state of the environment reporting. Collaborative management of hauora catchment plans, from implementation, would encourage ongoing knowledge sharing and capacity building for the long-term.

It has been wonderful to have had the time over the last year to understand how freshwater is valued by the Southland community. I am looking forward to listening more, and developing advice to council that reflects how we can work together to look after this taonga we share. - Fiona Within the co-design work of a hauora approach and framework for integrated catchment management, it is believed a number of subordinate, complementary outcomes have potential to be explored and realised. Such subordinate, complementary outcomes could include:

- (a) developing knowledge sharing, outreach and education resources and activities that integrate and emphasize mātauranga Māori and build increased awareness of the regional obligations and opportunities inherent in Te Tiriti o Waitangi;
- (b) developing enhanced, potentially more sophisticated, channels, techniques and capacity for engagement, advice and knowledge building with key stakeholder groups. There is potential for this enhanced capability to be centred on and leverage the existing expertise of land sustainability officers. It is expected that the resulting hauora framework for catchment management will guide analysis of opportunities in this area;
- (c) facilitating "catchment connections" experiences to connect people within catchments. It is envisioned that such experiences would focus on multiple dimensions of connections within catchments, including:
  - (i) connecting people from specific catchments with their catchment's receiving environments;
  - (ii) connecting people from different sub-catchments on specific FMUs;
  - (iii) connecting people from both rural and urban communities;
  - (iv) connecting iwi and wider community members;
- (d) updating the Terms of Reference for River Liaison Committees to recognise and integrate collective values, and important concepts such as ki uta ki tai, te mana o te wai, and te hauora te wai.

### **Priority Two**

Development and maintenance of a curated and current web-based information portal providing a trusted "one-stop shop" for information, advice, and resources. This will support enhanced decision-making and increased uptake of mitigation measures known to be effective within Southland catchments.

### Need

In order to support decision-making that is both efficient and effective, people need an easy way to access information about the problem, mitigation options, effectiveness, appropriateness and cost. Such information must be accessible, understandable, trusted, and consistent if Council is to expect stakeholders to act upon it. A comprehensive information portal, as a one-stop shop for information seems both necessary and possible within existing technology frameworks.

### Outcome

Increased implementation of effective mitigation measures on farm and/or businesses, and for local communities.

The regional forum has allowed me the opportunity to learn more about Southland's fresh water and our community's interaction with our waterways. I'm looking forward to the challenging discussion's ahead and I'm excited to be able to play a role in shaping the future of Southland's freshwater.

### - Kelsi

### Deliverable

A review of completed studies and research to identify proven mitigation options relevant to the context of Southland catchments.

Development and maintenance of a curated and current web-based information portal providing a trusted one-stop shop for information, advice, and resources that will support enhanced decision making and increased uptake of mitigation measures known to be effective within Southland catchments.

### **Suggestions for Delivery**

It is envisaged that an initial modest investment, focusing on "low hanging fruit" may be possible (for example, silt-trap construction) with the opportunity to progressively build and develop a more substantial platform. Work in this area will leverage the considerable existing body of knowledge and recent research available from research entities and industry good organisations. Perhaps the central challenge lies in both filtering and curating information and advice that is relevant, both to the Southland region and to specific land-use types prevalent within different catchments. Once established, such a portal offers potential to promote and "market" subsequent incentives or co-investment opportunities that may encourage uptake of effective mitigation measures.

Within this work, there is potential to facilitate uptake of citizen science projects and leverage the considerable momentum inherent within regional community catchment groups. There is the opportunity to facilitate co-implementation of mitigation projects by multiple land managers, and potentially connect experts and/or volunteers with land managers seeking assistance in implementing mitigation measures.

### **Priority Three**

Review and streamline selected consents and compliance processes where positive action is to be encouraged and facilitated. Map, illustrate, and publicly share the refined consents and compliance processes.

### Need

While some land managers have a strong desire and motivation to act on the knowledge that they could be investing in more positive interventions for water quality and environmental outcomes, some are deterred by the expense, complexity, and requirement to engage professional consultation. The inability to effectively anticipate the process to be followed (timeframes for approval, likely costs) deters others. Increasing efficiency, transparency and predictability, while reducing uncertainty, seems likely to encourage increased investment by land managers in infrastructure and activities deemed favourable for water quality and environmental outcomes. Also, there is potential for council to reap efficiency gains on behalf of ratepayers.

We all have an impact on Southland's water. That impact may be hard to see, hard to measure or quantify. However, as we move down the catchment, from the mountains to the sea, that impact becomes clearer. Southland's aspirations for water can be achieved when we acknowledge this, trust science, and work together.

- Lisa

### Outcome

Increased efficiency, transparency and trust in Council regulatory and compliance processes, accompanied by increased investment by land managers in infrastructure and activities supportive of positive environmental outcomes.

### Deliverable

- Assessment of specific infrastructure investments or activities requiring consent and ongoing compliance which seem likely to deliver desirable outcomes for water quality and wider environmental outcomes (for example, livestock winter shelters or wetland construction, development and enhancement).
- Identify and act upon obvious inefficiencies, streamlining where possible to make it easier for land managers to "do the right thing".
- Development and illustration of a clear and concise process flow so that applicants have a clear sense of the process (akin to providing a foreign tourist with a map, timetable and pricing schedule in order to negotiate the London Underground).

### **Suggestions for Delivery**

It seems necessary to draw upon the recent experiences of both Council, mana whenua and selected stakeholders to establish what might be considered an indicative 'journey map' for the type of resource consent application being analysed, documented and mapped. Such analysis is expected to surface obvious points of inefficiency for refinement to improve regulatory process and practices (for example 'farm gate consents' for activities that provide for a greater good to the environment).

It is expected an outcome of such a journey map will be clearly identified expectations and information deliverables required at different stages of an application process. There is potential to share practical stories from recent stakeholders to help others understand and interpret any resulting journey map.

It would be worth considering how the process could be streamlined between Environment Southland, local territorial authorities and Ngai Tahu ki Murihiku.

# Conclusion

We have reflected on what we have heard and discussed over the past 12 months and appreciate the values Southlanders have for freshwater. We have reflected on the draft objectives for freshwater for the region and the challenge to bridge the gap between the current state of our waterbodies and those objectives. The preliminary analysis highlights that four contaminants (nitrogen, phosphorus, bacteria and sediment) are problematic and, directly or indirectly, contribute to failures to meet the draft freshwater objectives across parts of the developed region. We are aware of the challenge before us and recognise the need to consider the health and resilience of our water, te hauora te wai, within the context of the holistic environment, including people, water, and land.

"I see the mahi of the Regional Forum as the greatest opportunity our community has had in a generation to align our economic future with sustainable environmental outcomes. I was delighted to find how aligned my family's core values and objectives are with those set out for the Forum by Ngai Tahu ki Murihiku."

- Paul

Whilst we continue our process to consider how to meet the freshwater objectives, we see an opportunity to get activities underway now to improve our water or help inform the decisions ahead. We put forward three recommendations focused on enabling our communities to work together and build capacity to meet the challenge of inspiring change across the region. These are:

- **Priority One:** Scope and design a collective values-led hauora approach and framework for integrated catchment management.
- **Priority Two:** Development and maintenance of a curated and current web-based information portal providing a trusted "one-stop shop" for information, advice and resources that will support enhanced decision making and increased uptake of mitigation measures known to be effective within Southland catchments.
- **Priority Three:** Review and streamline selected consents and compliance processes where positive action is to be encouraged and facilitated. Map, illustrate, and publicly share the refined consents and compliance processes.

The Forum are excited to commence the next phase of their work on how to meet the freshwater objectives for Southland by considering the impacts and timing of options available to our region. We welcome your consideration and feedback on the recommendations for practical action and look forward to your continued support and guidance for the Regional Forum process.

- Michelle

The work on the forum has clarified to me the issues surrounding water quality in our Region and engagement from community has underlined the need to make changes for future generations. We are resolute in finding the solutions that will enable sustainable prosperous communities.

# Glossary

**Assimilative capacity:** the ability of the environment to absorb or dissipate contaminants which it receives.

**Attenuate:** to lessen the amount, force, magnitude, or value. In an environmental context, attenuation refers to processes that reduce the concentration of contaminants in soil or water.

**Attribute:** a measurable characteristic of fresh water, including physical, chemical and biological properties, which supports particular values.

**Benthic cyanobacteria:** also known as blue-green algae. Naturally occurring in aquatic ecosystems, but has the potential to multiply to high concentrations and form blooms. Can contain toxins.

Brackish: slightly salty (more saline than freshwater, but not as much as seawater).

**Cumulative:** formed by successive additions. In the context of this report, a cumulative effect is the combination of effects resulting from multiple individual activities.

*E. coli*: abbreviation of Escherichia coli. A bacterium commonly found in the intestines of humans and other warm-blooded animals. Used to measure faecal contamination in freshwater - see also 'Faecal indicators'.

**Enterococci:** plural of 'enterococcus', a bacterium that naturally occurs in the intestines of humans and animals, including birds, fish, and reptiles. Used to measure faecal contamination in marine water - see also 'Faecal indicators'.

**Faecal indicators:** bacteria (E. coli and Enterococci) which come from the intestines of humans and animals. The presence of the bacteria is monitored to identify sources of faecal contamination.

**Freshwater objective:** an intended environmental outcome in a freshwater management unit.

**Gap analysis:** scientific report showing the difference between the current state of water bodies and the state required by the draft freshwater objectives.

**Gross eutrophic zone (GEZ):** an area that has low sediment oxygenation, soft mud, and the presence of high macroalgal cover. These areas are in poor condition and can no longer support most estuarine animals and shellfish.

**Hauora:** a state of health, in the context of being fit, well, healthy, or robust. In an environmental context, the environment may be compromised but still has the resilience to 'bounce back' to a healthy state.

Kaitiaki: cultural guardians.

**Kaitiakitanga:** the exercise of guardianship by the tangata whenua of an area in accordance with tikanga Māori in relation to natural and physical resources, and includes the ethic of stewardship.

**Ki uta ki tai:** translated literally as 'from the mountains to the sea'. See explanation on page 4 of this report for further detail.

I have enjoyed being a part of the Regional Forum, exploring the vastness of the province, the unique landscapes of Southland, the people and their relationship to the land and water. We have interesting conversations and as we look to the next stage I'm aware of the challenge ahead.

- David

**Limit:** the maximum amount of resource use available, which allows a freshwater objective to be met.

**Macroalgae:** collective term used for seaweeds and other marine algae that are generally visible to the naked eye.

**Macroinvertebrate:** any animal lacking a backbone and large enough to see without the aid of a microscope.

Macrophyte: an aquatic plant large enough to be seen by the naked eye.

**Mahinga kai:** food, places for obtaining natural foods, methods, and cultural activities involved. See explanation on page 3 of this report for further detail.

Matauranga: information, knowledge, education.

Mauri: spiritual essence, lifeforce.

Mitigation: In the context of this report, a measure to lessen the effect of an activity.

**Ngāi Tahu ki Murihiku:** represented by Te Rūnanga o Ngāi Tahu and the four Rūnanga Papatipu of Murihiku (Te Rūnaka o Waihōpai, Te Rūnanga o Awarua, Te Rūnanga o Oraka Aparima, and Te Rūnanga o Hokonui).

**Non-regulatory:** approaches other than using regulations to control an activity. In the context of this report, 'non-regulatory' refers to methods able to be used by Council which are outside of the regional plan.

**Objective:** describes an intended outcome. See also 'freshwater objective', which has a specific meaning in the context of the National Policy Statement for Freshwater Management.

**Periphyton:** coating found on rocks and river bed material, consisting mainly of algae but also including fungal and bacterial matter. Periphyton is part of a natural ecosystem, but can become a nuisance growth.

Phytoplankton: plankton consisting of microscopic plants.

**Regulatory:** Control with regulations. In the context of this report, 'regulatory' refers to the regional plan under the Resource Management Act in which Council can set conditions for or prohibit an activity.

**Tangata whenua**: people of the land, local owner-occupier, original inhabitant, the people that hold the tūrangawaewae and the manawhenua in an area, according to tribal and hapū custom.

**Taonga:** treasured possession (material or abstract, e.g. language); Māori interest in these is protected by the Treaty of Waitangi and New Zealand statute and common law.

**Te Mana o te Wai:** The integrated and holistic wellbeing of a waterbody. See explanation on page 3 of this report for further detail.

**Trophic condition (TLI):** an indication of water quality for a lake. Trophic Level Index (TLI) is calculated using four separate water quality measurements: total nitrogen, total phosphorous, water clarity, and chlorophyll-a.

**Value:** any national value, and includes any value in relation to fresh water (that is not a national value) which a regional council identifies as appropriate for regional or local circumstances (including any use value).

The need to improve the quality of the region's water is the challenge we face going forward. Many of the issues are going to be national and not just relate to Southland and will require solutions across all sectors of the community.

- Ewen