



Murihiku Slow the Flow
Upper Mataura Pilot
Execution Plan
July 2024

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1. Introduction

Project Name	Murihiku Slow the Flow Pilot Project
MFE Project ID and Deed Number	PJ-0003297 #26508
Project Description	Murihiku Slow the Flow will pilot a collaborative approach to understanding the feasibility of nature-based climate adaptation solutions (NBS) to reduce the impact on high flood risk areas and reflect qualities of hauora that support the health and well-being of waterbodies within Murihiku Southland. The project will work with iwi partners, stakeholders, and the community of the Upper Maitāwhiri. A collaborative approach will be used to clarify the problem and identify and test possible NBSs the learnings which will inform Murihiku Southland’s climate adaptation planning and science programmes, and the development of Murihiku’s Integrated Flood Management Approach.
Project Managers	Randal Beal & Dr. Ella Lawton
Project Sponsor	GM Integrated Catchment
Timeframe	July 2023 - June 2025

2. Background

The Mataura catchment was subject to extensive flooding in early February 2020, which resulted in the evacuation of more than 4500 people from their homes. To reduce the current flood risk to Gore and Mataura, and future increased risk due to climate change, solutions need to reduce the peak flow of the Mataura River. The Mataura River is in a degraded condition and its waters have been overallocated. Long-term integrated solutions are needed to reduce flood risk and reflect qualities of hauora that support the health and well-being of waterbodies within Murihiku Southland, so the environment and people can thrive.

Toitu to marae o Tane

Toitu to marae o Tangata

Toitu to Iwi

When the land and waters are strong, so are the people.¹

The purpose of this pilot project is to collaboratively identify and test effective and cost-efficient nature-based solutions for flood mitigation and river health in the Upper Mataura. The pilot will create and road test a recipe for nature-based solutions (NBS) achieving an integrated approach to building resilience in Murihiku Southland. The pilot will facilitate the dialogue and collaborative decision-making processes needed in climate adaptation planning to identify the feasibility and success for several NBS mitigations, and next steps needed to implement these projects.

Nature-based flood management supports the concept that flood risk management measures should be comprehensive, locally specific, integrated and balanced across all concerned sectors. The concept of using NBSs to improve the water retention capacity at the landscape scale, also known as ‘sponge functioning of catchments,’ has been recognised to help reduce and delay peak flows and stimulate infiltration to the groundwater, thus reducing flood and drought risks.

As shown in figure 1 below organises flood management methods into two categories: structural and non-structural. Structural methods involve physical changes to natural features or human infrastructure, including engineered (hard/grey) methods, such as dams, floodbanks or floodways, and natural and nature-based (soft/green) methods, including natural defences (increasing vegetation/wetlands, soil health and water retention) and sustainable practices (smart planning, giving the river ‘room to move’, and adaptable farming). Non-structural measures are defined as those that seek to change social conventions like policies, regulations, social institutions, organisations or individual behaviour, and better alert systems. Most flood risk management projects will comprise both structural (hard and soft methods) and non-structural components.²

¹ Te Ao Marama Incorporated (February 2020) *Ngāi Tahu ki Murihiku Freshwater Objectives*. Prepared for the Southland Regional Forum. Updated September 2020. <https://snip.ink/3Ofg3VNF>

² World Wildlife Fund (2016) *Natural and Nature-based Flood management: A green Guide*. Washington, DC: World Wildlife Fund. <https://www.worldwildlife.org/publications/natural-and-nature-based-flood-management-a-green-guide>

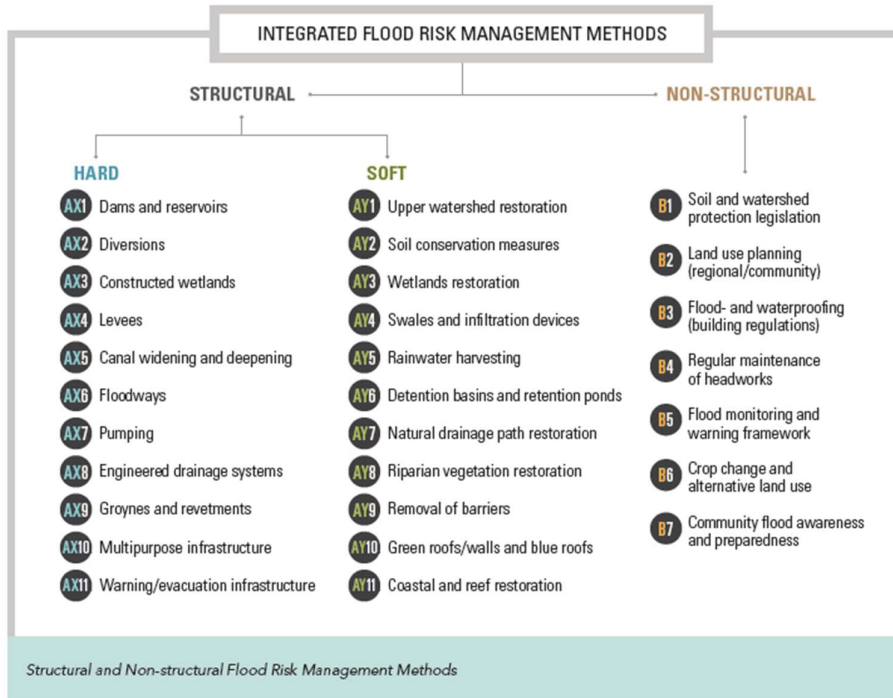


Figure 1: Integrated Flood Risk Management Methods.²

Stages 1 and 2 of the project were used to scope of the various data gathering and science projects already underway in the Upper Maitava. The Project Teams also spent time discussing possible nature-based solutions with several Catchment Groups and community of the Upper Maitava. There seemed to be a reasonable amount of support to pursuing investigating the following NBSs:

Nature Based Solution	Benefits
Detention bunds	<p>Relatively low-cost structures which can often be constructed without needing resource consents (e.g., bunds <3 m high, catchment <50 ha). Enable productive land-use between events.</p> <p>Can achieve both water quantity and quality (reduced sediment, particulate and faecal microbe) control.</p> <p>Can be targeted to manage localised gully, bank erosion and flooding.</p> <p>Can provide water for stock drinking, firefighting, and irrigation in rural areas.</p> <p>Can provide water for non-potable uses in urban areas such as for passive urban cooling.</p>
Constructed wetlands	<p>Potential to design for specific storage targets.</p> <p>Can be sited in strategic locations.</p> <p>Provide wide range of co-benefits, including contaminant reduction, habitat, and biodiversity, mahinga kai, aesthetics, cultural.</p> <p>Less expensive than conventional wastewater treatment options.</p>
Vegetation, i.e., tussock & forest	<p>Landcover change can be used to increase infiltration, canopy interception and evapotranspiration and thus reduce magnitude and temporal response of flood peaks.</p> <p>Forest cover can provide carbon-sinks for carbon sequestration.</p>

	Green corridors and similar can lead to habitat creation and passage for birds and fish and improvements in water quality (e.g., biodiversity, visual clarity, etc).
Room for the River	Increased stormwater storage and conveyance capacity in system (flood plain, stream courses). Encourages greater biodiversity. Can become self-maintaining. Aesthetic value increased. Possible improvements to water quality and ecosystem health.

The pilot project will develop hydrodynamic models and use other suitable techniques, to test a series of NBSs against several weather event scenarios. In collaboration with Te Ao Mārama Inc, NBS Hauora Assessment Criteria will also be developed to test the broader benefits of using NBSs. Hauora is understood to be a state of health, which can be thought of as meaning fit, well, vigorous and robust, describing a healthy resilience for waterbodies.³ The project team will work across Environment Southland and other key agencies to inform on what science and information is required, what is already available and what additional data and information is needed.

Environment Southland is exploring approaches to climate adaptation and building community resilience. The principles and aspirations for this work are in the Proposed Regional Climate Change Strategy for Murihiku Southland, as shown in appendix 1. The draft Infrastructure Strategy 2024-2054 proposes councils' climate adaptation programmes and includes the use of Floodplain Management to guide long-term resilience planning for Murihiku Southland. The Murihiku Slow the Flow Pilot Project will be informed by and will inform, this work.

Success for the project will be for the Murihiku Slow the Flow Project to become a catalyst for conversations and action to move toward long-term climate resilience and reflect hauora, in the face of the increased flood risk. The project will enable us to collectively explore different processes and tools, identify what might work where, and build on our learnings as we go. The project will help shift the conversation, to redefine the problem and source solutions that are beyond 'hard infrastructure', toward an integrated approach for long-term success. More detail about this in the engagement plan⁴.

³ Bartlett et al. (2020) *Draft Murihiku Southland Freshwater Objectives. Providing for hauora, the health and well-being of waterbodies in Murihiku Southland*. Technical Report. Environment Southland, Publication No 2020-06. <https://snip.ink/MFel-Nqp>

⁴ 240726_MSTF Pilot Engagement Plan - <https://objective.es.inet/documents/A1036116/details>

3. Project objectives

The Murihiku Slow the Flow Pilot Project in the Upper Maitara contains four objectives:

1. Foster a collaborative approach between Environment Southland and the Upper Maitara Pilot Project iwi partners and stakeholders. The pilot processes and outcomes will be guided by the Principles and Aspirations set out in the Proposed Regional Climate Change Strategy, as agreed by papatipu rūnanga ki Murihiku and the councils of Murihiku Southland.
2. The learnings and outputs from the Upper Maitara Pilot Project will inform future regional climate adaptation planning and decision-making. The project team will use effective ways to capture, share and apply learnings from the project to benefit the whole of Murihiku Southland. Outputs, such as the 'nature-based solutions hauora assessment criteria', will be tested through the pilot and all efforts will be made to ensure the outcomes are integrated into future work programmes. Learnings from the pilot project, and application of outcomes, will be highlighted and shared throughout the project, at the Nature Based Solution conference in April 2025, and in the final June 2025 report.
3. Conduct comprehensive feasibility studies of the selected nature-based solution options using hydrodynamic modelling and rigorous assessment against climate change and weather events. This assessment framework will be developed by July 2024, the data gathering and processing completed by December 2024, and evaluation process determine the effectiveness and suitability of the chosen nature-based solution approaches by March 2025.
4. By June 2025, the community of learning will represent a broad cross-section of iwi reps and rūnanga, community, local government agencies, industry, and specialist expertise exploring climate adaptation planning and the opportunities, benefits and barriers associated with nature-based solution.

It is envisaged that while these steps will collectively be completed by June 2025, these will contribute to the much longer regional adaptation pathway that reflects the development of climate adaptation planning for the region.

Project Outcomes

- 1. Established Collaboration and Alignment:**
 - A successful collaborative framework between Environment Southland, Upper Maitara Pilot Project iwi partners, and stakeholders, aligned with the regional climate change strategy.
- 2. Informative Framework for Regional Adaptation:**
 - Comprehensive learnings and outputs from the pilot project that will serve as a foundational resource for future regional climate adaptation planning and decision-making across Murihiku Southland.
 - Development and testing of 'NBS hauora assessment criteria', integrated into future work programmes.
 - A detailed report, to be released in June 2025, capturing the project's learnings and applications.
- 3. Completed Nature-Based Solutions Feasibility Studies:**
 - Researched feasibility studies of selected NBS, using hydrodynamic modelling and climate event assessments, completed by December 2024.
 - Determined effectiveness and suitability of the nature-based solutions by April 2025, providing a solid basis for implementation.

4. Developed Community of Learning:

- A diverse and knowledgeable community of learning, encompassing iwi representatives, community groups and individuals, local government, national government agencies, industry professionals, and specialists.
- Enhanced understanding and exploration of climate adaptation planning and the practicality of NBS for Murihiku Southland.

4. Draft Scope

In scope:

1. The requirement of the project is first and foremost, to fulfil the requirements of the Ministry for the Environment Slow the Flow – Murihiku Southland Deed (August 2023). It requires all funded project activities are completed and reported on by June 2025.
2. An invitation to the papatipu rūnanga ki Murihiku will be extended at any time, to collaborate, engage and/or observe the pilot project, to achieve the pilot project objectives.
3. The project is designed with adaptive management in mind. Sharing learnings along the way and feeding these back into future projects is part of the project's success.
4. Creative communication opportunities are fundamental to increasing understanding and interest in the project.
5. Community come on the journey; create ways for groups and individuals to learn and share so they can help in the identification of opportunities, benefits and barriers to nature-based flood mitigation methods.
6. Collaboration with other regional councils to share learnings and provide support where possible.

Out of scope:

1. The physical works required to construct/build nature-based solutions to floodplain management.
-

5. Timeframes

Stages	Draft Stages
<p style="text-align: center;">1</p> <p>July 2023 – February 2024</p>	<p>Create a Team</p> <p>Initial engagement and discussions with the Councils of Murihiku Southland to gauge interest in the project and potential involvement.</p> <p>Confirm collaborative relationship with Te Ao Mārama Inc and rūnanga.</p> <p>Build awareness and understanding of the need for floodplain management and nature-based solutions, with key decision-makers and stakeholders.</p> <p>Confirm pilot location is the Upper Mataura.</p> <hr/> <p>Draft the Pilot Project Plan</p> <p>Gather information and case studies showing the benefits of floodplain management and nature-based solutions.</p> <p>Initiate discussions with Project Team and an invitation for their involvement in the pilot, particularly science, science data, policy, and biodiversity. Discuss possible benefits, barriers and opportunities for using nature-based solutions.</p> <p>Initiate the development and design of the Slow the Flow infographic.</p>
<p style="text-align: center;">2</p> <p>February – August 2024</p>	<p>Confirm Pilot Project Plan</p> <p>Host a stakeholder workshop check-in on the Project Plan, particularly the pilot area. Form the Project Steering Group. The workshop included a review of the problem definition, what success looks like, possible NBS options for the pilot, and who is else needs to be involved and how engagement is carried out.</p> <p>Complete the Slow the Flow infographic.</p> <p>Confirm NBS to be explored in the pilot.</p> <hr/> <p>Data and Modelling Programme Development</p> <p>Identify methods for modelling and testing nature-based solutions.</p> <p>Identify outcomes to test NBS against.</p> <p>Develop an assessment framework.</p> <p>Form a technical team to undertake the modelling and assessment.</p>
<p style="text-align: center;">3</p> <p>August 2024 - January 2025</p>	<p>NBS Hauora Assessment Criteria</p> <p>Agree on the scope for the collaborative development of the ‘NBS hauora assessment criteria’ with Te Ao Mārama.</p> <p>Support and/or undertake the development of criteria to assess the impacts of nature-based solutions and how they reflect qualities of hauora that support the health and well-being of waterbodies within Murihiku Southland.</p>

	<p>Upper Mataura Slow the Flow Fieldtrip</p> <p>Bus trip around Upper Mataura sites of interest to discuss and review possible nature-based solution methods. Share updates on the project including the data and modelling programme, findings from Ministry for the Environment’s literature review and initial findings from the NBS hauora assessment criteria. Capture discussions and feedback to inform the next steps.</p>
<p>4</p> <p>January – June 2025</p>	<p>Testing Nature-Based Solutions</p> <p>Using the catchment model from in stage 2, the NBS data, and hauora assessment criteria in stage 3, run the criteria against the model with rigorous assessment against climate change and weather events.</p>
	<p>Murihiku Slow the Flow Conference</p> <p>A half-day conference with invited speakers to share their knowledge and understanding of nature-based solutions, including sharing the results of the Upper Mataura Pilot project. Followed by a half-day workshop identifying opportunities to implement the learnings from the pilot in the Upper Mataura, and across the region.</p>
	<p>Framework Review Update and Report</p> <p>Review learnings from the project and update NBS framework. Produce a report and supporting communications summarising findings and sharing next steps.</p>

See Appendix 1 for the Activity Plan.

The Ministry for the Environment funding requirements are that the funds are spent on delivering key outcomes by July 2025. These are detailed in the table below, Reporting milestones. See the MfE Deed for reporting requirements for further details⁵.

Milestones	Ministry for the Environment Reporting Milestone	Date
1	2023-2024 Six-Monthly Report and Summary of Expenses. Initial Project Plan.	31 st January 2024
2	2023-2024 Annual Report and Summary of Expenses. Invoice for Year 2 (2024-2025).	31 st July 2024
3	Brief report/visual summary of compiled and groomed data and information. Final project plan.	31 st July 2024
4	2024-2025 Six-Monthly Report and Summary of Expenses. Draft report outlining initial engagement and technical results.	31 st January 2025
5	2023-2024 Annual Report and Summary of Expenses. Final report including engagement and technical results.	31 st July 2025

⁵ 230713_Signed Deed
<https://objective.es.inet/documents/A943982/details>

6. Draft Project Deliverables

- Flood model capable of showing the impact and effectiveness of the identified solutions as mitigation against severe weather event scenarios.
- Nature Based Solutions hauora assessment criteria, developed in collaboration with Te Ao Mārama, and rūnanga.
- A modelling report summarising the findings and detailing the effectiveness and cost of 1-2 nature-based solutions for flood mitigation in the Upper Maitai, including the pros and cons of each solution.
- Assessing the Pilot Project against the Regional Climate Change principles and their efficacy for practical application.
- Analysis of the project outcomes and shared learnings considering other Murihiku Southland projects, particularly for collaborative work through the Regional Climate Change Working Group and local rūnanga.
- Develop several different ways (science communication methods) to share the learnings and outcomes from the project with the Community of Learning and wider Southland community.
- An engaging and informative 2-page summary for wider dissemination showing key findings and recommendations.
- Workshops and fieldtrips sharing project progress and findings with the ‘Community of Learning’.

Ministry for the Environment specific requirements from Deed⁶.

- Final technical analysis and recommendations report should include:
 - Summary of findings from the technical work.
 - Summary of outcomes from the engagement work and climate adaptation ‘community of learning’.
 - Evaluation of options in relation to values and local aspirations.
 - Recommendations for most effective nature-based solutions or interventions in the catchment.
 - Identification of feasibility of 1-2 NBS projects.
 - Considerations for future risks and mitigation actions for when the next extreme event occurs.
 - Documenting next steps needed to implement the projects.

⁶ 240119_EFF1085 - Environment Southland - Amended Final NBS Deed - Slow the Flow
<https://objective.es.inet/documents/A1033838/details>

7. Draft Constraints and Dependencies

A key outcome for the project is to build relationships with local rūnanga, territorial authorities and key stakeholders. The dependencies for achieving a successful outcome are the partners and stakeholders. Their interest and/or capacity will constrain the success of the project.

Having a clear definition and understanding of success, across the partners and stakeholders, is fundamental. The pilot will be designed to enable the exploration of alternative methods and processes so that the learnings from the project are the success, rather than the outputs themselves, although they may add substantial benefit.

The environmental, physical, social, political and economic characteristics of the Upper Maitara will constrain the types of nature-based solutions that could and will be explored. The decision-making criteria for both the selection and application of nature-based solutions ‘to place’, will need to consider all these aspects.

The identification and collection of the relevant science and data needed to inform flood modelling projects can be timely and costly. The Upper Maitara Pilot Project focuses on an area of the region where there is already relevant data and science upon which we will build. Once we have identified the available information and data gap, a constraint is likely to be the capacity of our preferred science providers to carry out the work.

The project hopes to explore ways to engage widely on the difficult issue of climate adaptation and possibly retreat. Finding and utilising the science communication expertise required to support this engagement is a possible constraint. A successful outcome is also dependant on Environment Southland’s by-in and capacity for this.

8. Draft Assumptions

There is interest by the community in identifying alternative adaptation methods for flood mitigation.

There are a group of climate adaptation practitioners in Southland who want to collaborate and be involved.

The region has majority of the right information to develop the model and test the NBSs. The data gap can be filled in the time and with the funding available.

Appendix 1 – Draft Activity Plan – v.1

	Activity	Who is involved	Measure	Stage 2 (February - July 24)	Stage 3 (August -January 25)	Stage 4 (February – June 25)
Project Planning	Pilot Project Plan	ES Project Team and Pilot Working Party	Murihiku Slow the Flow Project plan supported by TAMI and approved by the Executive Team.	Plan revised to better reflect the Upper Mataura pilot context. Plan completed by the end of March 2024.	Revise pilot project plan and consider whether any amendments are required.	Revise pilot project plan and consider whether any amendments are required.
	Engagement Plan	ES Project Team and Pilot Working Party	Engagement plan for pilot aligns with wider engagement planning for progressing the regional adaptation pathway and Catchment Operations flood modelling work.	Drafted.	Update with mid-project reporting.	Iterative.
	Te Ao Mārama work programme	ES Project Team, ES exec, Council and TAMI	Long-term Slow the Flow project and climate adaptation input resourcing is secured. TAMI resource ensures TAMI are able to fully engage in scoping hauora criteria to be tested via pilot project.	Te Ao Mārama resourcing for Murihiku Slow the Flow included in draft LTP and work TAMI work programme. Develop scope to develop NBS hauora assessment criteria.	Involvement in wider project and pilot yet to be agreed. As agreed by scope, work collaboratively on the development of the 'NBS hauora assessment criteria'.	Hauora assessment criteria tested on the nature-based solutions and socialised.
Engagement	Regional Climate Change Working Group (RCCWG)	Project Team	RCCWG comfortable with level of oversight/engagement relevant to proposed RCCS.	Quarterly updates at RCCWG meetings. Presented at RCCWG Climate Adaptation Workshop, May 2024.	Ongoing oversight/involvement to be iterative.	Iterative.
	'Nature-based solutions hauora assessment criteria' development	TAMI, project team, ES science team	TAMI can fully engage in scoping hauora criteria to be tested via pilot project.	Meeting with TAMI to develop scope for	Collaborative workshop to plan the project – 7 th August.	Application of the criteria and revise.

				assessment criteria development.	Mahi – field work and developing criteria. Draft criteria for testing.	
	Workshops/fieldtrip	Pilot Working Party & community	Number of people, involvement by key partners and stakeholders.	n/a	Fieldtrip to showcase proposed and established nature-based solutions and future possible NBS sites (early November).	Mini-conference to further explore the use of nature-based solutions in Murihiku Southland. Guest speakers and showcasing the project.
	Communication material	ES Project Team, ES Coms Team	n/a	Slow the Flow infographic, flyer and webpage.	Update flyer and webpage with initial results.	Hauora infographic. Conference material.
Data and modelling	Develop values framework	ES Project Team, technical collaboration	By-in from attendees and general support from the stakeholders. Feedback from stakeholders captured.	Stakeholder hui to test draft values and indicators framework options with stakeholders.	Further develop the More than Water model to the STF framework.	Use framework to test scenarios. Review to incorporate learnings.
	NBS identification and finalisation.	ES Project Team, technical collaboration	Interest from possible collaborators in being involved in the project.	Initial engagement and workshop.	Those interested continue discussions and draft agreement or collaboration.	Complete work, present at NBS conference, and contribute to final report.
	Data and Modelling Plan, including scenario development.	ES Project Team & external support	n/a	Develop methodology with consultants and science team support.	Finalise model.	Run NBS options through model and evaluate.
Regional spatial planning	Issues and options paper	ES Project Team & ES Policy Team	n/a	n/a	Scope discussion paper highlighting issues and options for implementing NBS.	Complete discussion paper.
Reporting, reflection and learning	MfE project reporting	Project Lead	Includes reflective process. Completed on time.	Iterative reflection and collation of learnings.	Iterative reflection and collation of learnings.	Final report on Upper Maitāura pilot project.

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	TAMI report	Project Lead	TAMI Board requirements are met.	Ongoing bi-monthly reporting to TAMI Board.	Ongoing bi-monthly reporting to TAMI Board.	Ongoing bi-monthly reporting to TAMI Board.
	Adapting pilot project to wider long-term Murihiku Slow the Flow regional workstream	ES Project Team, TAMI, wider community group?	Evaluation of pilot ensures clear direction of how the process could be improved across the region to ensure improved outcomes for regional climate adaptation.	n/a	n/a	Final report to provide guidance on longer-term regional approach.
Summary	Key project Milestones	n/a	n/a	Community workshop, June 2024.	Collaborative workshop with TAMI mid-2024. Community Fieldtrip - November.	Mini-conference – April. Final report, reflections, learnings.

Appendix 2 – Proposed Regional Climate Change Principles and Aspirations

Detailed principles

These principles will guide how Murihiku Southland local government agencies will work together, including prioritising to determine regional action.

They highlight the importance of recognising mutual dependencies and for example, taking a catchment focused and/or community focused approach to working across boundaries and prioritising the key issues.

These Murihiku Southland principles can be understood in more detail as follows.

Kaitiakitanga *Guardianship*

- Recognise our duty of care to safeguard our environment's fundamental life supporting capacity.
- Create a balanced framework, which supports many inter-connected strands.
- Value the wellbeing and livelihoods of our present and future generations.

Hauora *Wellbeing*

- Live with and understand how everything is connected.
- Recognise a healthy, functioning environment is inherent to our individual and collective wellbeing(s).
- Enhance community and environmental resilience in the face of change.

Whakarāneinei *Anticipation*

- Think and act with a long-term perspective, valuing and reinvesting in our environmental capital.
- Create proactive pathways for action, doing what we can now with what we know now.
- Ensure relevant regional science and information underpins a data-led approach.

Mōhiotanga *Understanding*

- Understand risks and look for potential ways to avoid, mitigate and manage risk.
- Pursue iterative management, adapting our approach as we learn and know better.
- Sow the seeds of how our future may be different, creating a broad community of learning.

Kotahitanga *Inclusivity*

- Share knowledge widely and transparently.
- Proactively consider those most vulnerable and voices least heard.
- Create a fair transition to our future.

Whakamana *Empowerment*

- Enable courageous pathways for action, inspiring individual and collective action.
- Look for opportunities and respond with innovation and creativity.
- Support our young people to understand, participate and be resilient in the face of their future – offering them hope.

Mahitahi *Alignment*

- Think ki uta ki tai – mountains to the sea, considering the effects in every direction and across boundaries.
- Adopt a united, integrated, consistent, and holistic approach enabling informed and balanced decision-making.
- Foster collaboration among various stakeholders, businesses, community groups and individuals.



Overarching aspirations

Our collective values spanning science, beliefs and hopes for the future, come together to form our aspirations for our regional response to a changing climate.

They provide an agreed 'direction of travel' for local government agencies, which can be improved and modified as the journey progresses.

Ongoing cross-agency discussions will help develop and implement aligned pathways towards these aspirations. These pathways will include managing the effects of a changing climate as well as capitalising

on potential opportunities that may benefit the region, keeping in mind the importance of ensuring that our future generations will also have the best possible opportunities. Additional specific aspirations may be developed, as part of the journey towards creating a Framework for Action.

The following aspirations reflect the collective intent of local government agencies to support effective responses to our changing climate across Murihiku Southland.

In addition to these overarching aspirations, further aspirations provide a direction regarding mitigation, adaptation as well as communications and engagement as per the key focus areas of this strategy.

Our aspirations

- 1 Te Mana o Te Ao Turoa – the mana of the environment is valued and respected enabling our people to be responsive as our climate changes.

- 2 Science and Mātauranga underpins our response to our changing climate in Murihiku Southland.

- 3 We understand the changes, challenges and opportunities associated with our changing climate and will act courageously, building resilience to respond and thrive.

- 4 We will create meaningful change within one generation* and inspire future generations to continue this work.

* One generation equates to 25 years

