



Auckland Water Strategy


# Implementation Plan

Auckland Council's strategy to protect and enhance te mauri o te wai, the life-sustaining capacity of water.

**2022 – 2050**

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A group of people are working on a hillside, engaged in environmental restoration work. In the foreground, a man in a dark hoodie and cap is using a shovel to dig in the soil. Another man in a dark jacket with a red hood stands nearby, looking on. In the background, a lake is visible, surrounded by dense green trees and vegetation. Other people are scattered across the hillside, some working and others observing. The overall scene is one of active environmental care and community involvement.

**te mauri o te wai,  
the life-sustaining  
capacity of water,  
is protected and  
enhanced.**

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# About this Implementation Plan

This document accompanies the 2022 **Auckland Water Strategy** (the Water Strategy). Please read that document before this one.

## The Auckland Council Group

The Auckland Water Strategy (the Water Strategy) sets a vision for Auckland's waters and provides strategic direction for investment and action across the Auckland Council group.

The Auckland Council group has a broad role in delivering water outcomes:

**Auckland Council** (council), as a Unitary Authority, has both regional and district council functions. Two key pieces of legislation structuring council's activities are the Resource Management Act and the Local Government Act. National direction through legislation and national planning instruments drives inter-related planning and policy outcomes expected from council. At the regional level, there are key strategic and planning documents that guide or direct council delivery functions, particularly in the interrelated land and water management planning space.

These planning and strategy mechanisms (e.g. Auckland Plan, Auckland Unitary Plan, Local Board Plans, Long term Plan etc) inform several functional areas of council, and are delivered through council's asset managers, including council-controlled organisations. Some of the key council delivery activities include:

- regulatory services such as consenting, monitoring, and compliance for effects on fresh water and coastal water
- the undertaking of policy evaluation and research activities into plan objectives and associated council work programmes
- delivery of storm water infrastructure and inter-related services.

**Watercare** provides drinking water and wastewater infrastructure and services (e.g. administration of trade waste bylaws on behalf of council).

**Auckland Transport** influences land use and the storm water network with associated significant discharges. The transport network is Auckland's largest public realm asset and investment.

**Eke Panuku Development Auckland** delivers urban regeneration in Tāmaki Makaurau (Auckland) and is responsible for bringing water into place-making.

## Who is this Plan for?

This document is designed for Auckland Council group staff and elected members. In particular, the document is designed to guide staff as they implement the Water Strategy.

The strategy has been developed in recognition that many of the council's current approaches needs to change to achieve a meaningful improvement to the mauri of water in Auckland. The Auckland Council has given strong political direction to coordinate water management. The Water Strategy and its Implementation Plan are reflective of this direction.

## How this Plan is organised

This Implementation Plan provides detail to guide implementation of the Water Strategy. It is organised by the eight Strategic Shifts in the Water Strategy opposite.

Each strategic shift represents long-term change in the council's approach towards a stated aim. Actions designed to achieve that aim are presented in this plan and categorised by delivery timeframe. Action-owners are identified. Current project status (planned, underway or complete) is also described.

The Strategic Shifts are designed as a package with clear interactions and interdependencies. For example, the Empowered Aucklanders Strategic Shift towards an **empowered community approach** to engagement is fundamental to community contribution to a **blue-green network** as part of the Integrated Land Use and Water Planning Strategic Shift.

Note that Strategic Shifts are designed so that the council can add actions to the framework as progress is made. This means that the council will update the Water Strategy and Implementation Plan as progress is made.

## Strategic Shifts

### 1. Te Tiriti Partnership

The council and mana whenua working together in agreed ways on agreed things

### 2. Empowered Aucklanders

The council working with Aucklanders for better water outcomes

### 3. Sustainable Allocation and Equitable Access

Prioritising mauri when using water, to sustain the environment and people in the long term

### 4. Regenerative Water Infrastructure

Ensuring Auckland's water infrastructure is regenerative, resilient, low carbon, and increases the mauri of water. It should be seen and understood by Aucklanders

### 5. Water Security

Creating water abundance and security for a growing population through efficient use and diverse sources

### 6. Integrated Land use and Water Planning

Integrating land use and water planning at a regional, catchment and site scale

### 7. Restoring and Enhancing Water Ecosystems

Taking catchment-based approaches to the health of water ecosystems

### 8. Pooling Knowledge

Fostering a shared understanding enabling better decisions for our water future

## The actions in this plan

Each action has a short description designed to provide indicative detail for implementation. The descriptions are not scopes and are therefore not exhaustive, they will guide staff in the implementation of the Water Strategy.

For each action, an indicative delivery timeframe and owner is identified. Where an action is listed as ongoing, this identifies that once scoped and undertaken, that action should continue. The timeframes shown provide for further scoping and may be adjusted as a result.

Costs for all actions have not been identified. In many cases, actions are underway or already planned as part of council group work programmes. Other actions can be accommodated without significant additional resources. Some actions may require additional resourcing, and these will be prioritised through normal council group funding processes.

Throughout development, the council commits to applying the twin lenses of the Water Strategy's cross cutting themes: **Equity and Affordability** and **Climate Change**. This means that actions should be designed and delivered in ways that address both cross-cutting themes. **Council resources are available** to guide advisors and decision-makers.

Where applicable, targets are also identified. Over time, the council may design further targets and add these to the Water Strategy framework. Some actions provide for this explicitly such as a target for water literacy.

## The Water Strategy is more than the actions in this Implementation Plan

The actions identified in this Implementation Plan are the specific actions required to create a foundation for a shift in the council's approach to water outcomes over time. They are not the full extent of actions required to shift the council towards the vision of the water strategy.

The council develops strategies to guide planning and decision making at all levels. The Water Strategy provides an aspirational vision and inspirational strategic shifts to progress towards that vision over time. That progress will require many decisions over the 30-year life of the Strategy; each guided by the vision and aims articulated in that document.

At its core, the Water Strategy is about a new way of working across the council group for water outcomes across Auckland. This is reflected in the holistic vision. By explicitly naming the protection and enhancement of mauri as the organising principle of the council's approach to water outcomes in Tāmaki Makaurau Auckland, the council commits to the prioritisation of the life-sustaining capacity of water in decision-making and commits to strengthening its partnership with mana whenua to do so.

A fundamental role of high-level strategy is to direct planning for the council's Annual Budget, Asset Management Plans and the Long-Term Plan cycles. With the Water Strategy adopted, the council commits to showing how we are prioritising the wellbeing of water and how the strategic direction of the Water Strategy is embedded in advice and decisions.

As progress is made, other actions will be developed, and decisions taken on emerging issues over time and the council group must work together to embed the strategic intent of the Water Strategy into these.

## What will Implementation require?

Successfully delivering on the vision and integrated aims of the Water Strategy will require a coordinated and sustained approach to delivery across the council group. Delivery will also depend upon and should strengthen relationships with mana whenua, mataawaka, communities and central government.

To implement the Water Strategy, the council will need:

1. to take a consistent, sustained approach to putting te mauri o te wai at the centre of council group planning and investment decisions and action
2. the skills and capacity to deliver on the water strategy, legislative requirements, and partnership relationships
3. a strong culture of holistic planning, action, reporting and post-implementation review that feeds back into adaptive planning processes
4. ongoing clarity of roles and responsibilities across the council group, with all teams directed and accountable for their role and function
5. to enable mana whenua participation in the council's work on water.
6. in some cases, the council may need to expand monitoring frameworks to monitor and report on the delivery of the Water Strategy.

Implementation Actions		YR
IMP1	<b>Appoint Executive Lead Team Water Lead</b> (complete)	✓
IMP2	<b>Appoint Water Strategy programme implementation coordinator</b>	1
IMP3	<b>Coordinated workforce planning to fill gaps and changing needs</b> (ongoing)	1-3
IMP4	<b>Update Long-Term Plan investment prioritisation criteria to reflect the Water Strategy</b>	1-3
IMP5	<b>Council reporting on te mauri o te wai</b>	1-3

## Monitoring and reporting

Progress against the Water Strategy's vision will be monitored and reported against in three ways:

1. **Delivery of Actions** will be reported annually to a committee of the governing body with Water Strategy in its Terms of Reference. Each strategic shift has associated actions with indicative implementation timings identified. Actions are concentrated on years 1-3 and so generally represent short-term delivery. This Implementation Plan provides detail for each action in the Water Strategy.
2. **Dual Benchmarking** at agreed intervals provides a way to assess our journey to the realisation of the vision of the Water Strategy. Scores from both the Water Sensitive Cities and Mātauranga Māori frameworks will track progress against the Strategy and inform future decisions and action.
3. **Water Strategy Targets** are long-term measures of success. Over time, the council may design further targets and add these to the Water Strategy framework. Targets will be reflected in the council's instructions to its council-controlled organisations and its Long-Term Plan.

# Our Strategic Framework

## Auckland's context, challenges, aims, and required actions

The Water Strategy sets a vision for the future. The framework consists of:

1. **vision**
2. **treaty context**
3. **challenges**
4. **cross-cutting themes**
5. **strategic shifts and associated aims and actions**
6. **implementation.**

The **framework** is designed to make implementation steps clear for council to track progress towards that vision so that communities and partners can hold council accountable to progress over time.





# Water Strategy Strategic Framework

<b>Our Vision</b>	<b>Te mauri o te wai, the life-sustaining capacity of Auckland’s water, is protected and enhanced</b>	
<b>Our Treaty Context</b>	The Council and mana whenua must take a partnership approach to the protection, management and enhancement of water	
<b>Our Over-arching Challenges</b>	<ol style="list-style-type: none"> <li>1. Protecting and enhancing the health of waterbodies and their ecosystems</li> <li>2. Delivering 3-waters services at the right time, in the right place, at the right scale, as the city grows</li> <li>3. Having enough water for people now and in the future</li> <li>4. Reducing exposure to water-related natural hazard risk over time.</li> <li>5. Affordability for Aucklanders</li> <li>6. Improving how the council works with its treaty partners</li> <li>7. Improving how the council organises itself</li> </ol>	
<b>Our Cross-cutting Themes</b>	<p><b>Equity and Affordability:</b> Equitable access to essential services and affordable investment</p> <p><b>Climate Change:</b> Mitigating and adapting to the impacts of climate change</p>	
<b>Our Strategic Shifts</b>	<p><b>1 Te Tiriti Partnership</b> The council and mana whenua working together in agreed ways on agreed things</p>	<p><b>2 Empowered Aucklanders</b> The council working with Aucklanders for better water outcomes</p>
	<p><b>3 Sustainable Allocation and Equitable Access</b> Prioritising mauri when using water, to sustain the environment and people in the long term</p>	<p><b>4 Regenerative Water Infrastructure</b> Ensuring Auckland’s water infrastructure is regenerative, resilient, low carbon, and increases the mauri of water. It should be seen and understood by Aucklanders</p>
	<p><b>5 Water Security</b> Creating water abundance and security for a growing population through efficient use and diverse sources</p>	<p><b>6 Integrated Land Use and Water Planning</b> Integrating land use and water planning at a regional, catchment and site scale</p>
	<p><b>7 Restoring and Enhancing Water Ecosystems</b> Taking catchment-based approaches to the health of water ecosystems</p>	<p><b>8 Pooling Knowledge</b> Fostering a shared understanding enabling better decisions for our water future</p>
<b>Our Implementation</b>	<p>Co-ordination, Capacity and Capability across the Council Group</p> 	

# Te Tiriti Partnership

## The council and mana whenua working together in agreed ways on agreed things

The council has made commitments to acknowledge and align to a Māori worldview, including in the Auckland Plan 2050 and the Our Water Future Public Discussion Document: ‘Apply a Māori worldview to treasure and protect our natural environment (taonga tuku iho)’ and protect and restore ‘Te Mauri o Te Wai o Tāmaki Makaurau’.

To effectively deliver on its legal obligations and commitments made, the council needs to have enduring partnerships with its treaty partners and find ways to work together in agreed ways on agreed things. This will require **new ways of working towards shared goals**.

The vision of the Water Strategy is about mauri. Partnership with mana whenua is essential to working with this and related concepts. The council’s approaches need to change, and relationships must strengthen over time to realise the aspiration of this Strategy.

## Aim

### The council and mana whenua are partners in the protection, management, and enhancement of water. This means:

1. partnership mechanisms support working together in agreed ways on agreed things.
2. mana whenua exercise rangatiratanga and kaitiakitanga and are meaningfully involved in decision-making roles across the water system.
3. the council’s processes recognise different perspectives and ways of knowing. Mātauranga is part of water system planning.
4. mana whenua cultural associations with water systems are protected and enhanced.

## Challenges

1. The council’s norms and processes that can be challenging for mana whenua to navigate
2. Competing demands on time and resources for both mana whenua and the council
3. A significant, sustained resource imbalance between mana whenua and the council
4. Council staff understanding of and capability to deliver Treaty commitments and statutory responsibilities
5. Council engagement with mana whenua on water issues is not centrally coordinated
6. The council’s monitoring and reporting requirements are often at the regional level, whereas mana whenua are more directly focused on a placed-based or rohe-level view
7. Partnership is affected by central government reform and policy direction, which can create uncertainty.

Te Tiriti Partnership Actions		YR
1.1	<b>Apply dual framework to benchmark water outcomes</b> (ongoing)	1
1.2	<b>Resource mana whenua to enable meaningful partnership relationships with the council</b> (ongoing)	2-3
1.3	<b>Report on te mauri o te wai</b> (ongoing)	2-3
1.4	<b>Resource mana whenua to lead environmental monitoring</b> (ongoing)	2-10
1.5	<b>Create further partnership mechanisms with mana whenua</b>	4-10
1.6	<b>Enable and support co-governance arrangements where appropriate</b>	4-10

## Strategic Shift 1 | **Te Tiriti Partnership**

### Action 1.1 **Benchmark water outcomes using dual framework**

Dual Benchmarking at agreed intervals provides a way to assess our journey to the realisation of the vision of the Water Strategy. Scores from both the Water Sensitive Cities and Mātauranga Māori Benchmarking frameworks will inform progress along this journey.

Benchmarking water governance and service delivery using a dual approach will aid shared understanding between the council, mana whenua and the broader public. Through the Water Strategy, the council has partnered with the Tāmaki Makaurau Mana Whenua Forum through the te Pou Taiao to develop a Mātauranga Māori Benchmarking Framework.

Note the Forum has not yet adopted the Mātauranga Māori Benchmarking Framework. The development of the framework is ongoing, and the form and use of the framework will be decided by the Tāmaki Makaurau Mana Whenua Forum. The council is supporting that process at time of writing.

The framework is based on, and designed to be used alongside, the Water Sensitive Cities Index. The council group completed the Water-Sensitive Cities benchmarking in 2021. See **Water Sensitive Cities Benchmarking and Assessment Tāmaki Makaurau - Auckland Report** for more detail.

The Water Sensitive Cities benchmarking is undertaken by council group staff, using council- appointed facilitators. The Mātauranga Māori Benchmarking Framework is designed to be undertaken by mana whenua, using council-funded and mana whenua-appointed facilitators. Should central government **Three Waters Reform** produce a new delivery entity, that entity will be invited to participate in the benchmarking process to maintain usefulness of the benchmarking.

Note that alongside the Mātauranga Māori Benchmarking Framework itself, three documents will be produced to evidence/support the development of the mātauranga-led framework:

1. Mātauranga Māori Benchmarking Framework explanation and guidelines
2. Mātauranga Māori Benchmarking Framework results report
3. A review and critique of Water Sensitive Cities – from a Māori worldview

Going forward,

1. the Water-Sensitive Cities and Mātauranga Māori Benchmarking Framework will be completed at a regional level and repeated alongside the State-of-Environment reporting (e.g. every 5 years).
2. future decisions of whether to refresh the Water Strategy or not be informed by the results of the 5-yearly Water-Sensitive Cities and Mātauranga Māori Benchmarking Framework.
3. the Water-Sensitive Cities and Mātauranga Māori Benchmarking Framework be used to inform the transition to a new three waters delivery environment.
4. any new delivery entity be invited to participate in the benchmarking process.

Action 1.1  
**Benchmark water outcomes using dual framework** (ongoing)

Status  
**Underway**

Owner  
**Council**

**YEAR**  
**1**

## Strategic Shift 1 | **Te Tiriti Partnership**

### Action 1.2

#### **Resource mana whenua to enable meaningful partnership relationships with the council**

The council will investigate a coordinated approach to making engagement and partnership on water issues more meaningful for mana whenua and contribute to mana whenua capacity.

Recognising mātauranga Māori requires mana whenua leadership and direction as mātauranga has a local expression - the mātauranga of wai (water) is held by the people of the local iwi, at the level of the whānau and marae.

While acknowledging the need for improved partnership is a positive step, the ability of iwi to partner and engage must be supported with resources. Resourcing and maintaining relationships with the council is already challenging for mana whenua iwi.

This action requires a stocktake of partnership engagement with mana whenua across council group including strategy and policy development, project design and delivery, environmental monitoring, and input and review of consent applications. Recommendations for resourcing will then be made. This action is a key input to **action 1.3**

#### Action 1.2

#### **Resource mana whenua to enable meaningful partnership relationships with the council (ongoing)**

Status  
**Scoping**

Owner  
**Council**

**YEAR**  
**2-3**

### Action 1.3

#### **Report on Te Mauri o Te Wai**

Communicating progress in the restoration and enhancement of te mauri o te wai requires robust monitoring frameworks and reporting. Any new water services entity resulting from reform would be invited to provide inputs to the integrated reporting.

As part of the Water Strategy the council commits to making place-based information on the mauri of water available. Data collection for **National Policy Statement for Freshwater Management** (NPS-FM) will be made publicly available annually for each Freshwater Management Unit. The council will investigate providing this information directly to mana whenua iwi. Over time, additional information collected by the council that is determined to be relevant by each iwi could be included in reporting.

Note that under the NPS-FM council must publish data collected for 'ecosystem health' and 'human contact' indicators from sites with long-term SOE monitoring annually. This proposal intends to enable fit-for-purpose iwi-centric reporting at their direction.

The Water-Sensitive Cities and mana whenua-led benchmarking be completed at a regional level and repeated alongside the State of the Environment reporting every 5 years. Council will establish a process to respond to any iwi submission on the above benchmarking reports within an agreed timeframe.

#### Action 1.3

#### **Report on Te Mauri o Te Wai (ongoing)**

Status  
**Scoping**

Owner  
**Council**

**YEAR**  
**2-3**

## Strategic Shift 1 | Te Tiriti Partnership

### Action 1.4

#### Resource mana whenua to lead environmental monitoring

The Resource Management Act 1991 provides for a local authority to transfer any one or more of its functions, powers or duties under the RMA to another public authority including an iwi authority.

The council's **National Policy Statement for Freshwater Management 2020 implementation programme** (NPS-FM) during 2021-2024 will establish freshwater management units (for lakes and rivers), and for each unit: a vision, values, outcomes and attributes in partnership with mana whenua. As part of this process, through engagement with mana whenua, there will be opportunities to identify new monitoring arrangements.

The council will partner with mana whenua via the NPS-FM programme to identify opportunities to transfer monitoring responsibilities. This may include resourcing required and in other cases, transfer of delivery of council functions.

Leadership and/or delivery of monitoring programmes would enable mana whenua to utilise their expertise, develop skills and exercise kaitiakitanga while enhancing connection to the environment. What's more, mana whenua expertise will be necessary to deliver against council's responsibilities under the policy. Transfer of responsibilities represents a modest but important marker of ongoing power-sharing between local government and iwi.

Action 1.4  
Resource mana whenua to lead environmental monitoring (ongoing)

Status  
**Scoping**

Owner  
**Council**

**YEAR  
2-10**

### Action 1.5

#### Create further partnership mechanisms with mana whenua

The council will investigate opportunities to enable greater ongoing partnership between councillors, council management and mana whenua on strategy, policy, and delivery related to water outcomes.

Opportunities could, for example, take the form of leader-to-leader meetings, a non-decision-making joint mana whenua and council collective forum for water discussions, a joint council committee (noting that ultimate decision-making rests with the Governing Body). Both a joint forum and joint committee could be expected to reduce costs including for resource management processes in time.

Clearly any investigation of a joint forum or committee would need extensive engagement with councillors and mana whenua. It may be that following detailed engagement, a forum is not considered the best outcome by all parties. Realising new arrangements may take time. This action signals an intent to continue to work with mana whenua towards an agreed outcome over time.

Action 1.5  
Create further partnership mechanisms with mana whenua

Status  
**Not started**

Owner  
**Council**

**YEAR  
4-10**

## Strategic Shift 1 | **Te Tiriti Partnership**

### Action 1.6

#### **Enable and support co-governance arrangements where appropriate**

Some te Tiriti o Waitangi settlements have included the establishment of co-governance structures. For example Auckland Council and mana whenua co-governance entities include:

1. Tūpuna Maunga o Tāmaki Makaurau Authority
2. Te Poari o Kaipātiki ki Kaipara (formerly the Parakai Recreation Reserve Board)
3. Ngāti Whātua Ōrākei Reserves Board

Further settlements will affect how water is governed and managed in Auckland. For example, a co-governance arrangement for the Kaipara Harbour (Kaipara Moana) is under negotiation. The Crown has also made commitments to negotiate Treaty settlement redress over the Waitemata and Manukau Harbours. The council will enable and support these arrangements.

Action 1.6

**Enable and support co-governance arrangements where appropriate**

Status

**Not started**

Owner

**Council**

**YEAR  
4-10**



## Empowered Aucklanders

### **The council working with Aucklanders for better water outcomes**

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The vision of the Water Strategy is that Aucklanders enjoy a strengthened relationship with water.

The council will put greater emphasis on empowering Aucklanders to be active participants in the design and implementation of water outcomes for the region and in their local area. Local boards and community groups have a crucial role in empowering Aucklanders and localising decision making. Encouragement and support will be given to organisations focused on the care and protection of Auckland's waterways and harbours

All Aucklanders are affected by the major decisions the council group makes about water. And **all Aucklanders have a role to play in achieving a resilient, liveable, productive, and sustainable future.** Planning for, adapting to and coping with the water-related challenges that Tāmaki Makaurau faces requires fundamental shifts in the way the council works in relation to water systems. Working with Aucklanders will be critical for the council's *social license* to enact the significant shifts required to transition to a water-sensitive region.

## Aim

**Aucklanders are empowered to shape decisions about, and are prepared for, our changing water future.** This means:

1. Aucklanders are water-literate, understand te mauri o te wai, and want to be active in shaping Auckland's water future
2. Aucklanders have safe, equitable access and feel connected to healthy, protected blue and green spaces
3. Aucklanders work together to be resilient to the impacts of extreme water-related events and to a changing climate
4. Aucklanders have the opportunity to manage and/or own local water solutions
5. Aucklanders can readily access and contribute to the council's data, information, and knowledge.

## Challenges

1. Achieving coordination of efforts and maximising community engagement processes to achieve multiple outcomes and benefits
2. Increasing the scale and reach of engagement processes
3. Understanding and increasing water literacy
4. Supporting communities to protect and enhance waterbodies and their ecosystems
5. Overcoming barriers to community managed and/or owned water solutions.

Empowered Aucklanders Actions		YR
2.1	<b>Develop and deliver a framework for, and measure, water literacy at regular intervals</b> (ongoing)	1-3
2.2	<b>Grow council group's water literacy education programmes</b> (ongoing)	1-3
2.3	<b>Resource mana whenua to lead community engagement for water projects in catchments in their rohe</b> (ongoing)	1-3
2.4	<b>Align, coordinate, resource and evaluate the council group's community engagement on water</b>	1-3
2.5	<b>Develop a measure of Aucklanders' access to blue-green spaces; a programme to increase access over time; and track progress</b> (ongoing)	1-3
2.6	<b>Investigate community-based ownership models for water infrastructure and services</b>	1-3
2.7	<b>Set targets for and implement empowered communities' approach for water projects across the council group</b> (ongoing)	4-10
2.8	<b>Review the council group's resilience-building programmes for effectiveness, and define and measure community resilience overtime</b>	4-10





## Strategic Shift 2 | **Empowered Aucklanders**

### Action 2.1

#### **Develop and deliver a framework for, and measure, water literacy at regular intervals**

The council will develop a Tāmaki Makaurau specific framework to measure the water literacy of Aucklanders. Elements of this framework will need to be developed in partnership with mana whenua to capture what is important to Auckland’s context. Water literacy will then be measured (based on the adopted framework) at regular intervals. A target for water literacy can be set once a baseline measure has been completed and reported against at appropriate frequency.

A collaborative working group across council and Watercare will:

1. assess and decide on an appropriate water literacy framework (ie. what are the indicators to be measured, what method is used to measure them, clear purpose/s for the data and insights generated as a result)
2. assess/stocktake of existing data sets that could contribute to water literacy assessment.

#### Action 2.1

#### **Develop and deliver a framework for, and measure, water literacy at regular intervals** (ongoing)

Status  
**Scoping**

Owner  
**Council**  
**Watercare**

**YEAR**  
**1-3**

### Action 2.2

#### **Grow council group’s water literacy education programmes**

This action follows on from **action 2.1** and will further develop water literacy programmes in light of the established literacy measure and reporting. Over time, the council’s, improving understanding of the water literacy of Aucklanders will drive approaches to raise literacy via existing and new programmes and channels.

Local boards and community groups have important roles to play in guiding the implementation of water literacy programmes and building on the good work to date.

This action also involves partnership with mana whenua to develop mana whenua-led water education to increase Aucklanders’ understanding of Te Ao Māori relationships to water.

#### Action 2.2

#### **Grow council group’s water literacy education programmes** (ongoing)

Status  
**Scoping**

Owner  
**Council**

**YEAR**  
**1-3**

## Strategic Shift 2 | **Empowered Aucklanders**

### Action 2.3

#### **Resource mana whenua to lead community engagement for water projects in catchments in their rohe**

This action addresses the need to support and enable mana whenua to exercise rangatiratanga, manaakitanga and kaitiakitanga in their rohe. Mana whenua have expressed a desire to run engagement in their rohe.

The council will begin by confirming which mana whenua would like to take up this role in their rohe. This is an exciting opportunity to work in partnership and strengthen relationships with communities. This will likely involve long-term capacity development and resourcing support from the council. It may also require development of new iwi Māori-led community engagement principles and processes (noting that guidelines are currently under review as of writing).

The council is required to partner with mana whenua as to develop and deliver the **National Policy Statement for Freshwater Management** (NPS-FM). This includes public engagement. This represents a clear opportunity for collaboration with the council's treaty partners.

#### Action 2.3

#### **Resource mana whenua to lead community engagement for water projects in catchments in their rohe** (ongoing)

Status  
**Scoping**

Owner  
**Council**

**YEAR  
1-3**

### Action 2.4

#### **Align, coordinate, resource and evaluate the council group's community engagement on water**

This action will improve engagement processes across the council group and increase the diversity of Aucklanders 'heard' on water issues and projects. This will result in Aucklanders being routinely engaged in collaboration, so they are empowered to shape decisions on water projects.

A collaborative working group across the council and Watercare will:

1. assess engagement to ensure it is following council good practice and is effective, coordinated and aligned across the council group
2. ensure that community engagement for water projects is adequately resourced and that training is available for staff
3. test and develop community empowerment approaches in the water sector via engagement processes planned for 2022-2023
4. develop guidance on and targets for an 'empowered communities' approach' for water
5. partner with mana whenua to develop opportunities for them to lead community engagement in their rohe as per action 2.5.
6. review the need for and potentially establish community reference groups/catchment committees.

#### Action 2.4

#### **Align, coordinate, resource and evaluate the council group's community engagement on water**

Status  
**Scoping**

Owner  
**Council**

**YEAR  
1-3**

## Strategic Shift 2 | **Empowered Aucklanders**

### Action 2.5

#### **Develop a measure of Aucklanders’ access to blue-green spaces, a programme to increase access over time, and track progress**

Access to blue-green space is important for recreation and mental health. It can also promote connection and increase understanding of our natural environment and species.

The council will develop an ‘access to water’ spatial measure, define a target of success, and regularly measure and review progress towards that target. There are international examples of measures of access to water. The council will evaluate these and develop a measure fit for the Auckland context. The council will also evaluate whether an official position statement on access to water for health and wellbeing would be beneficial (similar to **action 5.1** Adopt a council position to address affordable water access).

Once Aucklanders’ access to water is measured, the council will develop (and leverage existing) approaches to enhance access, particularly where access is inequitable. This is closely related to **action 6.4** which will develop a blue-green network plan for Auckland.

#### Action 2.5

**Develop a measure of Aucklanders’ access to blue-green spaces, a programme to increase access over time, and track progress (ongoing)**

Status  
**Scoping**

Owner  
**Council**

**YEAR  
1-3**

### Action 2.6

#### **Investigate community-based ownership models for water infrastructure and services**

Involving communities in the ownership and management of their local infrastructure is a key element within developing a water-sensitive city.

Council will investigate case studies and models for community-based water infrastructure. Council will use this information develop pilots and programmes of work focused on increasing Aucklanders options to own and manage community-based water infrastructure and service delivery.

#### Action 2.6

**Investigate community-based ownership models for water infrastructure and services**

Status  
**Scoping**

Owner  
**Council**

**YEAR  
1-3**

## Strategic Shift 2 | **Empowered Aucklanders**

### Action 2.7

#### **Set targets for and implement empowered communities approach for water projects across the council group**

Council will develop methods for measuring progress and associated metrics of success for ‘empowered community approaches’ within water projects. Once developed, the measurement method will be used to track progress towards the aim of this shift. The method for measurement and metrics of success should be informed by the other actions within this shift.

#### Action 2.7

**Set targets for and implement empowered communities approach for water projects across the council group** (ongoing)

Status  
**Not Started**

Owner  
**Council  
Watercare**

**YEAR  
4-10**

### Action 2.8

#### **Review council group resilience-building programmes for effectiveness, and define and measure community resilience over time**

Existing operational delivery and hazard mitigation and adaptation work programmes that support community disaster resilience and climate change preparedness include:

- Natural Hazard Risk Management Action Plan
- Too Much Water Policy
- Shoreline Adaptation Plans
- Auckland Council implementation of the Climate Change Adaptation Act (once enacted)

There is an opportunity to develop a measure and related target for the aim ‘Aucklanders work together to be resilient to the impacts of extreme water-related events and to a changing climate’; and over time to review and assess the outcomes of the listed programmes to ensure they are delivering the aims of the council.

**Years 1-2 :** Define community resilience and measure it

**Years 3+ :** review resilience building programmes effectiveness (and make adjustments if needed)

#### Action 2.8

**Review council group resilience-building programmes for effectiveness, and define and measure community resilience over time**

Status  
**Not Started**

Owner  
**Council  
Watercare**

**YEAR  
4-10**

### Strategic Shift 3

# Sustainable Allocation and Equitable Access

## Prioritising mauri when using water, to sustain the environment and people in the long term

The council is responsible for sustainable allocation of water that provides for social, economic, and cultural well-being now and in the future, while maintaining the life-sustaining capacity of our water sources.

Central government policy programmes indicate that the council will need to prepare for **new ways of allocating and recognising interests in water in the future**. Importantly, the council must embed a hierarchy into decision making that prioritises first, the health and well-being of water bodies and freshwater ecosystems; second, the health needs of people (such as drinking water); and third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

## Aim

**When the council allocates water from the natural environment, water use is sustainable, and considers the health and wellbeing of ecosystems and people.** This means:

1. natural water ecosystems are protected, restored, or enhanced to levels where they are abundant and harvesting practices are possible
2. water allocation and use are responsive to environmental flows and resilient to a changing climate
3. allocation decisions apply a hierarchy of considerations specific to Tāmaki Makaurau that embeds mauri, equity, and climate sensitivity
4. regulatory and financial incentives are designed to encourage actions and activities that protect and enhance te mauri o te wai.

## Challenges

1. Increasing demand on water sources, for example, some aquifer management areas are at or nearing full allocation
2. Information gaps in monitoring data
3. Equity is not currently specifically required to be considered in how we allocate water into the future
4. Existing allocation limits and consent conditions do not adequately account for how climate change will affect water availability of a given water source over time
5. Although the council is conservative when setting take limits for sources, this does not adequately account for or measure the mauri of water in water resource management decision-making
6. Auckland's ecosystems are degraded and therefore the mauri of those water systems is reduced.

Sustainable Allocation and Equitable Actions		YR
3.1	<b>Develop indicators based on mauri to define allocation limits, in partnership with mana whenua</b>	1-3
3.2	<b>Assess Auckland's water resources and availability across the region using a Tāmaki expression of the Te Mana o Te Wai hierarchy</b> (ongoing)	1-3
3.3	<b>Develop a dynamic water availability model and use it to plan for the future</b> (ongoing model development)	1-5
3.4	<b>Set take limits and review allocation rules for the National Policy Statement for Freshwater Management using the Tāmaki expression of the Te Mana o Te Wai hierarchy</b>	1-5
3.5	<b>Understand the mauri of existing water sources where water is extracted for use, in partnership with mana whenua</b>	4-10
3.6	<b>Create a smart allocation system through increased monitoring and data analysis</b>	4-10

## Strategic Shift 3 | **Sustainable Allocation and Equitable Access**

### Action 3.1

#### **Develop indicators based on mauri to define allocation limits, in partnership with mana whenua**

At present, the council does not measure or assess mauri, or change in mauri, in our water allocation decision-making. The National Policy Statement for Freshwater Management (NPS-FM) provides council with an opportunity to include considering mauri in allocating water.

To understand mauri, the council will need to work in partnership with mana whenua to understand and align te ao māori knowledge of mauri of a water source, with council's ecosystem health assessment of each water source. Together, this dual-knowledge system approach can be used to establish baseline water resource availability (**Action 3.2**) and define new 'take limits' for applicants wanting to extract water (**Action 3.4**) from a water source.

This action is to develop indicators of mauri to define allocation limits and can be separated into two sub-categories:

**mahinga kai – kei te ora te mauri** (the mauri of the place is intact) and

**te mauri o te wai** (meaning the health of water ecosystems includes considering indicators of mauri across existence (physical) values, use (activity-based) values, and (unique to mauri) intrinsic (metaphysical) values intrinsic and metaphysical values)

Indicators will need to be developed along-side methods developed in **Action 7.1** within Restoring and Enhancing Ecosystems.



#### Action 3.1

#### **Develop indicators based on mauri to define allocation limits, in partnership with mana whenua**

Status  
**Scoping**

Owner  
**Council**

**YEAR  
1-3**

## Strategic Shift 3 | **Sustainable Allocation and Equitable Access**

### Action 3.2

#### **Assess Auckland's water resources and availability across the region using a Tāmaki expression of the Te Mana o Te Wai hierarchy**

A Tamaki expression of the **Te Mana o Te Wai** from the **National Policy Statement for Freshwater Management** (NPS-FM) has been drafted to assess Auckland's water resources and availability. It adds additional concepts to the NPS-FM hierarchy such as mauri, equity and climate change.

The Tāmaki expression of the framework will allow council to (for example) create buffers for the various uncertainties of climate variability and controls on water extraction ensures mauri is maintained as climate changes water volumes, flows and overall water resources for human use.

This action includes the finalisation of the framework in partnership with mana whenua and the review of the water allocation framework as part of the implementation of the NPS-FM. This work will be across the council.

#### Action 3.2

#### **Assess Auckland's water resources and availability across the region using a Tāmaki expression of the Te Mana o Te Wai hierarchy** (ongoing)

Status  
**Scoping**

Owner  
**Council**

**YEAR**  
**1-3**

### Action 3.3

#### **Develop a dynamic water availability model and use it to plan for the future**

A dynamic water availability model would estimate water availability in the hydrological cycle (including surface water and groundwater) and account for climate change. It would then be used as an input to dynamic allocation limits.

This is multi-year project that needs to be scoped and resourced. The councils current Unitary Plan policy effectiveness review (Resource Management Act Section 35 2(b)) is detailing the current data management practices. The dynamic water availability model can therefore be built from a deep level of understanding of what is needed.

This action would use the indicators developed in **action 3.1** and the framework and priority hierarchy in **action 3.2**. This model would also ideally be the basis for **action 3.4**, limit setting, however due to the need to the review of allocation rules and take limit it may be a parallel process where the model is updated iteratively.

This action also contributes to the **Pooling Knowledge shift**.

#### Action 3.3

#### **Develop a dynamic water availability model and use it to plan for the future**

Status  
**Scoping**

Owner  
**Council**

**YEAR**  
**1-5**

## Strategic Shift 3 | **Sustainable Allocation and Equitable Access**

### Action 3.4

#### **Set take limits and review allocation rules for the National Policy Statement on Freshwater Management using the Tāmaki expression of the Te Mana o Te Wai hierarchy**

This action will set new 'take limits' based on establishing baseline water quantity that considers protecting and enhancing mauri. Setting of take limits would apply the Tāmaki Makaurau expression of Te Mana o Te Wai (from NPS-FM) by including consideration of the mauri of water, equity, and climate change impacts.

A review of the allocation rules could, for example, define a new rule that sets a take limit that specifically identifies a proportion of water to 'stay in the environment' in response to increasingly longer dry periods. Protecting the mauri of the water is the highest priority in the Tāmaki hierarchy.

#### Action 3.4

**Set take limits and review allocation rules for the National Policy Statement on Freshwater Management using the Tāmaki expression of the Te Mana o Te Wai hierarchy** (ongoing)

Status  
**Underway**

Owner  
**Council**

**YEAR  
1-5**

### Action 3.5

#### **Understand the mauri of existing water sources where water is extracted for use, in partnership with mana whenua**

This action is to resource mana whenua to express mauri for local water sources that are currently consented for use. This is an important element of meeting requirements to account for the mauri of water in decision-making.

The mauri of every waterbody is specific and unique, emerging from its own whakapapa of ecology and people. Additionally, water is one of the foundations of te ao Māori, with the water cycle at 'the heart of the relationships between Ranginui and Papatūānuku'. Recognising this knowledge in council behaviours and decisions is essential to successful and sustainable environmental management and ensuring the protection and enhancement the mauri of the natural environment.

Note the Auckland Plan identifies the goal of treating our natural resources as ngā taonga tuku iho, as 'the treasures handed down'. This action ensures this goal is resourced for mana whenua.

#### Action 3.5

**Understand the mauri of existing water sources where water is extracted for use, in partnership with mana whenua**

Status  
**Not Started**

Owner  
**Council**

**YEAR  
4-10**



## Strategic Shift 3 | **Sustainable Allocation and Equitable Access**

### Action 3.6

## **Enhanced smart allocation system through increased monitoring and data analysis**

Over time, Auckland needs more sophisticated ways of understanding water allocation decisions. A 'smart' allocation system uses increased monitoring and data analysis to inform decisions in a more dynamic way.

This action provides new ways to improve and increase monitoring for water source health (i.e. on-going ways to measure te mauri o te wai), water extraction and water use to allow a more responsive approach to allocation of water. To date, undertaking monitoring on a catchment or regional scale is a challenge. The accessibility of efficiency-of-use data (enabling analysis) is also challenging.

This action is dependent on **Action 3.3** delivery and is closely aligned with **Pooling Knowledge**.

Action 3.6

**Create a smart allocation system through increased monitoring and data analysis**

Status

**Not Started**

Owner

**Council**

**YEAR  
4-10**

Strategic Shift 4

# Regenerative Water Infrastructure

**Ensuring Auckland's water infrastructure is regenerative, resilient, low carbon, and increases the mauri of water. It should be seen and understood by Aucklanders**

Auckland's sustained investment in infrastructure has delivered high levels of service, particularly for drinking water supply and wastewater.

However, the mauri of waterbodies has been degraded over time because of the historical approaches taken to infrastructure design and delivery.

Auckland needs long-term (generational) change to water infrastructure systems through new approaches that align with the council's aspirations for climate positive and resilient infrastructure.

**Water infrastructure can and must enhance wellbeing:** for example, Te Auaunga (Oakley Creek) and Awakeri wetlands have improved 'services' that were previously provided through piped and underground solutions. These projects are regenerative, 'green' infrastructure solutions that come with additional environmental, cultural, social, and economic benefits. Setting the aspiration now to ensure our infrastructure is mauri-enhancing, rather than mauri-diminishing, means the council's practices will change over time.

In time, the council will only invest in mauri-enhancing water infrastructure. This journey will take time, indicative dates are below:

**2025** the council has guidance, assessment methods and tools for regenerative and mauri-enhancing water infrastructure.

**2025-2030** existing and new water infrastructure is assessed for its impact on mauri.

**2030-2050** new infrastructure and replacement or renewals of existing infrastructure is regenerative and mauri-enhancing.

**2050-2080** the operation of water infrastructure is regenerative and mauri-enhancing.

## Aim

**Regenerative infrastructure systems enhance the life-sustaining capacity of water (mauri).** This means:

1. three waters infrastructure is well-planned, maintained and has the necessary level of investment while ensuring overall affordability for Aucklanders
2. the council uses its significant role in regulating, designing, delivering, renewing and managing water infrastructure to enhance the life-sustaining capacity of water
3. Auckland takes an adaptive planning approach to water infrastructure including staged, small-scale solutions
4. infrastructure solutions across Auckland are nature-based, regenerative, resilient, low or zero-emissions, circular in resource use, and built so that Aucklanders can connect with water
5. water-sensitive infrastructure is consistently maintained to a high standard by all asset owners
6. Auckland prioritises multipurpose infrastructure, including enabling public access.

## Challenges

1. An existing large, centralised infrastructure system – the product of 150 years of investment – that achieves economic efficiency, sometimes at the expense of other outcomes
2. Coordination across multiple infrastructure delivery and operational departments & organisations with different organisational drivers
3. Projects that achieve multiple outcomes require us to measure costs and benefits differently
4. A large amount of infrastructure is delivered by third parties (i.e., developers) that are not incentivised to seek or maximise multiple outcomes with their investment
5. While mauri is an intuitive concept, it is place-based and requires mātauranga to fully understand. Existing framework and approaches are often a barrier.

Regenerative Water Infrastructure Actions		YR
4.1	<b>Collate case studies to increase understanding of resilient, conspicuous, and mauri-enhancing water infrastructure solutions</b> (complete)	✓
4.2	<b>Review emissions reductions for water infrastructure against those required by Te-Tāruke-a-Tāwhiri and develop an emissions plan</b>	1-3
4.3	<b>Resource mana whenua to develop guidance and assessment methods for mauri-enhancing infrastructure</b>	2-3
4.4	<b>Assess and map impacts of existing water infrastructure on te mauri o te wai, in partnership with mana whenua</b>	2-3
4.5	<b>Evaluate and map resilience of the council’s water infrastructure systems</b>	2-3
4.6	<b>Partner with mana whenua to pilot water infrastructure projects that enhance te mauri o te wai</b> (ongoing)	2-3
4.7	<b>Include mauri in the council’s investment prioritisation process for the Annual Budget and Long-Term Plan in partnership with mana whenua</b> (ongoing)	2-3

# Strategic Shift 4 | **Regenerative Water Infrastructure**

**Action 4.1**  
**Collate case studies to increase understanding of resilient, conspicuous, and mauri-enhancing water infrastructure solutions**

The vision for the Water Strategy is that **te mauri o te wai, the life-sustaining capacity of Auckland’s water, is protected and enhanced.**

Concepts like mauri, and mauri-enhancing infrastructure are not widely understood across the water industry. Explanatory papers have been published and made available alongside the Water Strategy.

**Action 4.2**  
**Review emissions reductions for water infrastructure against those required by Te-Tāruke-a-Tāwhiri and develop an emissions reduction plan**

A transition to low and zero carbon (or carbon sequestering) water infrastructure is already part of the council’s work for the coming years. A specific emissions reduction plan to 2050 is required to drive a reduction in emissions from water infrastructure to ensure significant action is being taken in the sector.

A joint scope will be developed that includes alignment with other actions in the Water Strategy and Te-Tāruke-a-Tāwhiri.

**Action 4.1**  
**Collate case studies to increase understanding of resilient, conspicuous, and mauri-enhancing water infrastructure solutions**

Status  
**Complete ✓**

Owner  
**Council**

**YEAR**  
**✓**

**Action 4.2**  
**Review emissions reductions for water infrastructure against those required by Te-Tāruke-a-Tāwhiri and develop an emissions reduction plan**

Status  
**Underway**

Owner  
**Council Watercare**

**YEAR**  
**1-3**

## Strategic Shift 4 | **Regenerative Water Infrastructure**

### Action 4.3

#### **Resource mana whenua to develop guidance and assessment methods for mauri-enhancing infrastructure**

Working in partnership with mana whenua, the council can support the development and implementation of tools, capability, and institutional knowledge (iwi/hāpū owner knowledge, or shared knowledge) to deliver mauri-enhancing infrastructure.

This action will develop guidance and assessment methods to guide council and its partners towards mauri enhancing infrastructure solutions (central government, stormwater engineers, landscape architects, and other design practitioners associated). The project should connect with the council’s [guidance on water sensitive design for stormwater \(GD04\)](#) and [Te Aranga Māori design principles](#).

#### Action 4.3

#### **Resource mana whenua to develop guidance and assessment methods for mauri-enhancing infrastructure**

Status  
**Scoping**

Owner  
**Council**

**YEAR  
2-3**

### Action 4.4

#### **Assess and map impacts of existing water infrastructure on te mauri o te wai, in partnership with mana whenua**

Mapping impacts of existing water infrastructure on te mauri o te wai, in partnership with mana whenua will demonstrate a spatial view that can inform investment decisions in water infrastructure. This includes working with mana whenua to identify where water assets currently occupy waahi tapu and locations of significance.

This work could be started with a literature review of the many documented locations that water infrastructure has impacted mauri. These can be mapped (in an appropriate way) as areas of impact and overlaid with our spatial data for water infrastructure. This data exists as asset data in council’s geomaps). Wastewater treatment plants, pump stations and wastewater overflows may be priority infrastructure locations.

A joint council-mana whenua scope for this work should be created, likely through the Tāmaki Makaurau Mana Whenua Forum.

#### Action 4.4

#### **Assess and map impacts of existing water infrastructure on te mauri o te wai, in partnership with mana whenua**

Status  
**Scoping**

Owner  
**Council**

**YEAR  
2-3**

## Strategic Shift 4 | **Regenerative Water Infrastructure**

### Action 4.5 **Evaluate and map resilience of the council’s water infrastructure systems**

Resilience is currently the focus of significant council strategic, organisational, community and operational effort. Aside from the Water Strategy, the Auckland Plan 2050, Te-Tāruke-a-Tāwhiri, the 2021 Infrastructure Strategy, and the Natural Hazards Risk Management Action Plan specifically identify resilience as a desired outcome for Auckland, and council’s role in investing in increasing our resilience.

This action is to define and map the resilience of the council’s water infrastructure system to understand Auckland’s resilience challenges spatially. This action will be scoped collaboratively with staff responsible for implementation of the strategies and plans listed above.

Action 4.5  
**Evaluate and map resilience of the council’s water infrastructure systems**

Status  
**Scoping**

Owner  
**Council**

**YEAR  
2-3**

### Action 4.6 **Partner with mana whenua to pilot water infrastructure projects that enhance te mauri o te wai**

Pilots will build on **actions 4.1 and 4.2** (create understanding and develop guidance) and could be prioritised spatially with the input of **action 4.3** (where infrastructure that reduces mauri will be mapped).

The council would need to first collect information on any pilots underway and/or work with mana whenua who are interested in partnership. A focus of the pilots may be on wastewater solutions that increase mauri as stormwater and water supply solutions are somewhat understood.

A joint council-mana whenua scope for this work should be created, likely through the Tāmaki Makaurau Mana Whenua Forum.

Action 4.6  
**Partner with mana whenua to pilot water infrastructure projects that enhance te mauri o te wai (ongoing)**

Status  
**Scoping**

Owner  
**Council**

**YEAR  
2-3**

# Strategic Shift 4 | **Regenerative Water Infrastructure**

Action 4.7  
**Include mauri in the council’s investment prioritisation process for the Annual Budget and Long-Term Plan in partnership with mana whenua**

This action is to ensure mauri is considered in council’s investment prioritisation for long term planning and budgeting. Over time it will be expected that new projects or where older assets need to be replaced, opportunities are taken to deliver water infrastructure that enhances te mauri o te wai.

This action builds on **actions 4.1 and 4.2** which develop case studies, guidance, and assessment methods. The action may also be supported by the mapping action (4.3) where spatial priorities may be developed.

Action 4.7  
**Include mauri in the council’s investment prioritisation process for the Annual Budget and Long-Term Plan in partnership with mana whenua**

Status <b>Scoping</b>	<b>YEAR 2-3</b>
Owner <b>Council</b>	

# Water Security

## Creating water abundance and security for growing population through efficient use and diverse sources

Auckland’s population growth is forecast to increase the total demand for water supply. Climate change will affect water availability and demand over the life of the strategy. We will experience more dry days, and more frequent and longer lasting drought. Careful management of average and peak demand, as well as a diverse source portfolio, are required for sustainable water security.

The council will meet community expectations to make the most of the water that falls and to protect our water security. Water abundance can be created through water efficiency and diverse sources.

### The Waikato River will continue to play a vital role in Auckland’s water supply now and in the future.

The council therefore commits to strengthening its relationship with Waikato River iwi to recognise their connection to the river and rights and interests related to it. In 2022 a 20-year consent to take up to 150 million litres a day from the river was granted. This built on an existing consent for 150 million litres that is still active (300 million litres available a day once additional treatment capacity is built to cater to population growth). Over the life of the Water Strategy, demand-reduction measures and alternative sources are essential parts of Auckland’s water supply solutions. Through these, Auckland will increase its water security to balance its reliance on the river with its growth over time. Additional water source investigations are underway, including pilot projects for wastewater recycling for non-drinking water uses.

To reduce demand, the **council has set targets to reduce gross water consumption per person** in 2050 to less than 225 litres per day. The council has invested in smart meters and changed policy applying to rainwater tanks to accelerate reduction in network water use. Aucklanders are on track to reach this target and interim targets set for 2025 and 2030.

## Aim

**Auckland captures, uses, and recycles water efficiently so that everyone has access to enough water of the appropriate quality to meet their needs.** This means:

1. Auckland maximises rainwater capture and invests in recycled water at all scales
2. Aucklanders have equitable access to enough water of the appropriate quality to meet their needs (i.e. Residential and commercial)
3. Aucklanders are efficient users of water and can manage their own water security; they are resilient to changes in water availability and a changing climate
4. peak demand is managed to operate within source capacity.

YR	Water Security Targets
<b>Consumption</b> (demand)	
2025	<b>≤253 litres consumption per person per day</b> (gross PCC, network)
2030	<b>≤247 litres consumption per person per day</b> (gross PCC, network)
2050	<b>≤225 litres consumption per person per day</b> (gross PCC, network)
<b>Collection</b> (supply)	
2030	<b>20 million litres per day (non-dam) rainwater and recycled water capacity for beneficial use</b>
2050	<b>100 million litres per day (non-dam) rainwater and recycled water capacity for beneficial use</b>
2050	<b>30% of urban roof area to collect rainwater for use</b>



## Challenges

1. The risks of scarcity (including droughts) and inadequate quality (lack of water of suitable quality for a particular purpose or use)
2. The resource, environmental and cultural impacts of supplying water
3. Climate change will affect water availability and demand
4. Large-scale dam sources will likely have reduced capacity at times, due to higher sediment loads associated with more intense rainfall events (water is also more expensive to treat at these times)
5. Increasing the types and distribution of source water Auckland uses, increases resilience against change in rainfall patterns, and against larger-scale natural disasters
6. Watercare's commitment to reducing reliance on the Waikato Awa by reducing the contribution that the awa [river] makes to Auckland's total water used
7. National policy settings do not yet support increased water efficiency
8. Building the infrastructure to gather and interpret the data from smart-meters and direct customer communications to inform future decisions
9. Managing leaks across a large, reticulated network to conserve water.

Water Security Actions		YR
5.1	<b>Adopt a council position to address affordable water access</b>	1
5.2	<b>Develop a plan to address affordable water access in Auckland</b>	1
5.3	<b>Add a level of service for and develop a plan to proactively manage both peak demand and drought response</b>	1-3
5.4	<b>Model climate change scenarios to understand impacts on water sources</b> (ongoing)	1-3
5.5	<b>Develop a smart demand management system to predict and manage peak demand using smart meter data and associated communication tools to engage Aucklanders</b> (ongoing)	2-3
5.6	<b>Support central government to set targets for water efficient homes</b> (ongoing)	2-3
5.7	<b>Develop an investment plan for diverse sources to meet 2030 and 2050 targets, guided by te mauri o te wai for 2024 Long-Term Plan</b>	2-3
5.8	<b>Develop policy to achieve target of 30% of urban roof area to collect rainwater for use 2050</b> (ongoing)	2-5
5.9	<b>Develop regulations and targeted information to support Aucklanders to increase water capture for reuse (homes and businesses)</b>	2-5
5.10	<b>Monitor investments to meet water consumption reduction targets. Review targets in 2024</b> (ongoing)	4-10
5.11	<b>Pursue pilots, community engagement, technology, and regulations to enable purified wastewater reuse</b> (ongoing)	4-10

## Strategic Shift 5 | **Water Security**

### Action 5.1

#### **Adopt a council position to address affordable water access in Auckland**

For some Aucklanders, affordability is a barrier to accessing adequate water for health and wellbeing. For Aucklanders on reticulated water there can be a challenge to pay utility bills, while for rural Aucklanders there can be issues of supply during times of water scarcity.

The average water bill is projected to double this decade. Even with proposed water reform and the promise of operational efficiencies; the scale of investment in Auckland’s water infrastructure that is needed over the next 10-20 years will result in rising water service charges for consumers and increase unaffordability for lower-income households.

The council does not have an official position statement on access to water for health and wellbeing. A position statement would enable a coordinated response to the water access issues across the council group (**action 5.2**).

The position would be similar to the council’s position on homelessness adopted in 2017 (that homelessness in Auckland should be ‘rare, brief and non-recurring’, and to support those who do experience homelessness). The council is currently implementing a range of priority actions to do this, including ensuring council staff, policies and processes align with council’s position.

#### Action 5.1

#### **Adopt a council position to address affordable water access**

Status  
**Underway**

Owner  
**Council**

**YEAR  
1**

### Action 5.2

#### **Develop a plan to address affordable water access in Auckland**

The council will develop a work programme to deliver on its position on affordable access to water (action 5.1). This work programme will address lack of access and mitigate against the risk of a growth in lack of access for those on low and fixed incomes due to projected growth in water services charges (between 7% and 9% increases annually until 2029 and increases of approximately 3.5% annually in the following decade). This action includes a review of water pricing.

A review of international policy interventions for affordability and access to water for health and wellbeing will inform interventions to be considered:

- i. means-tested consumption subsidy
- ii. providing basic water for free and tiered pricing thereafter
- iii. fixed charge waiver (waive connection fee) for low-income households
- iv. incremental payment structures and payment assistance programmes
- v. rebates/lump sum payments.

The plan should consider rural communities, impacts of drought and be developed in partnership with mana whenua. The costs of any of the policies developed should consider a 4:1 return on investment in water for health benefits alone, and should include invest-to-save calculations that consider provider and user costs.

#### Action 5.2

#### **Develop a plan to address affordable water access in Auckland**

Status  
**Scoping**

Owner  
**Council  
Watercare**

**YEAR  
1**

## Strategic Shift 5 | **Water Security**

### Action 5.3

#### **Add a level of service for and develop a plan to proactively manage both peak demand and drought response**

The council has retained Watercare’s peak level of service which sets an expectation for supply capacity planning. This action adds a level of service to ensure peak demand can and will be actively managed. Managing peak demand will increase Auckland’s resilience to periods of sustained low rainfall.

When water use is forecast to be high, agreed proactive, staged demand management (but not necessarily restrictions) would be enabled more frequently than during a 20-year event (the current peak level of service).

The council and Watercare will develop a plan to proactively manage both peak demand and drought response with performance measures. The plan should include actions at regional, community and household levels with clear roles and responsibilities across the council group at different stages of implementation. This will increase Auckland’s resilience to periods of sustained low rainfall.

Additionally, when next reviewed, the water and wastewater bylaw may reflect the impact of the change in approach to management of peak demand.

#### Action 5.3

#### **Add a level of service for and develop a plan to proactively manage both peak demand and drought response**

Status  
**Scoping**

Owner  
**Council  
Watercare**

**YEAR  
1-3**

### Action 5.4

#### **Model climate change scenarios to understand the impacts on water sources**

This action includes understanding impacts of climate change on water source optimisation and inform the ISMM (Integrated Source Management Model) update. This is underway. (Year one)

Ongoing work will focus on understanding the impacts of climate scenarios on water source availability (including water quality) under changing hydrological conditions. Note also that the council group will continue to expand its wider understanding of climate scenarios to guide its planning. (Years one-three)

The council will retain its drought security standard 2022-2024. The standard will be reviewed as part of the council’s investment planning (the 2024 to 2034 Long-Term Plan), with appropriate public consultation. Climate change impact modelling of source and quality will inform the review.

#### Action 5.4

#### **Model climate change scenarios to understand impacts on water sources (ongoing)**

Status  
**Underway**

Owner  
**Watercare**

**YEAR  
1-3**

## Strategic Shift 5 | **Water Security**

### Action 5.5

#### **Develop a smart demand management system to predict and manage peak demand using smart meter data and associated communication tools to engage Aucklanders**

A smart-meter programme has been included in the council’s 2021-2031 Long-Term Plan. Smart meters allow households and businesses to access real-time information on their water usage and enable Watercare to manage the network more closely (including identifying leaks).

As rollout of the smart-meter network progresses, Watercare will use data collected through this growing network to understand patterns of peak demand to predict likely peak periods. Watercare will encourage users to manage demand via associated communications tools (i.e., apps).

### Action 5.6

#### **Support central government to set targets for water efficient homes**

Increasing the water-efficiency of new builds is an important component of meeting the council’s targets for per-person water consumption. Water-efficient fittings and appliances can account for 40 litres per person per day for an average resident.

The council will continue its contribution to central government programmes for more water-efficient homes. This programme is being led by the Ministry for Business, Innovation and Employment.

Note that council has an advocacy role and that the central government is the decision maker.

#### Action 5.5

**Develop a smart demand management system to predict and manage peak demand using smart meter data and associated communication tools to engage Aucklanders** (ongoing)

Status  
**Scoping**

**Watercare**

**YEAR**  
**2-5**

#### Action 5.6

**Support central government to set targets for water efficient homes** (ongoing)

Status  
**Scoping**

**Council**  
**Watercare**

**YEAR**  
**2-3**

## Strategic Shift 5 | **Water Security**

### Action 5.7 **Develop an investment plan for diverse sources to meet 2030 and 2050 targets, guided by te mauri o te wai for 2024 Long-Term Plan**

The Water Strategy’s vision will be used to guide the development of an investment plan for diverse sources to meet the Water Strategy targets. The investment plan would include a focus on management of peak demand, for example non-potable supply for non-potable uses such as irrigation.

Reporting at 5-year intervals on investigations into alternative sources is a requirement of the conditions on Watercare’s 2022 20-yr consent to take 150 million litres per day from the Waikato River. This action will support that reporting taking a long-term view.

It is likely the investment plan will include scenarios for the period to 2050 and apply an adaptive planning approach to achieve the 2030 and 2050 targets.

Action 5.7 <b>Develop an investment plan for diverse sources to meet 2030 and 2050 targets, guided by te mauri o te wai for 2024 Long-Term Plan</b>	
Status <b>Scoping</b>	<b>YEAR 2-3</b>
<b>Council</b> Watercare	

### Action 5.8 **Develop policy to achieve target of 30% of urban roof area to collect rainwater for use 2050**

The council will continue policy work to require all new dwellings to have retention tanks that provide water for non-potable uses (underway) to achieve a target of 30% of all roof area in Auckland’s urban area being enabled to collect rainwater for use by 2050.

This policy change could account for a reduction in water consumed by approximately 60 litres per-person per-day for an average resident. Reducing water use can save households and businesses in bills and potentially defer use of network storage which can improve network resilience to periods of lower rainfall.

This target will kick off a data collection project that will get underway in 2022 (link to **Pooling Knowledge** Strategic Shift).

Action 5.8 <b>Develop policy to achieve target of 30% of urban roof area to collect rainwater for use 2050 (ongoing)</b>	
Status <b>Scoping</b>	<b>YEAR 2-5</b>
<b>Council</b>	

## Strategic Shift 5 | **Water Security**

### Action 5.9 **Develop regulations and targeted information to support Aucklanders to increase water capture for reuse (homes and businesses)**

To enable Aucklanders to increase their own water resilience the council will develop appropriate regulation and provide targeted information for homes and businesses to capture water for reuse. Any regulation would need to go through a Resource Management Act process which would determine the outcome.

This action requires a review of existing and creation of an enabling regulatory framework to support Aucklanders to maximise water use at site. This includes rainwater but also increase on-site water recycling such as greywater reuse.

Alongside the regulatory framework is action to inform and educate Aucklanders on what they are enabled to do (currently and as additional regulation is developed).

The inform and educate part of this action is closely related to **action 2.1** which will develop and deliver a framework for water literacy. Additionally, this programme will benefit from insights generated from the growing smart-meter network and water-efficient homes pilot projects underway.

Action 5.9 <b>Develop regulations and targeted information to support Aucklanders to increase water capture for reuse (homes and businesses)</b>	
Status <b>Scoping</b>	<b>YEAR 2-5</b>
<b>Council Watercare</b>	

### Action 5.10 **Monitor investments to meet water consumption reduction targets. Review targets in 2024.**

In 2021 the council adopted consumption targets to reduce our gross per capita demand by approximately 20% as Auckland grows. Council committed to investments in a smart-meter programme and leakage reduction, and policy measures such as rain tank consent fee waiver. The council will progress investments and policy work to meet targets in an ongoing manner and report quarterly against water consumption targets.

The council commits to ongoing monitoring of investments as well as reviewing demand management measures against targets in 2024 and planning additional action depending on progress made.

The council has committed to reviewing with an eye to making the targets more ambitious at that point too.

YR	Water Security Targets
2025	<b>≤253 litres consumption per person per day</b> (gross PCC, network)
2030	<b>≤247 litres consumption per person per day</b> (gross PCC, network)
2050	<b>≤225 litres consumption per person per day</b> (gross PCC, network)

Action 5.10 <b>Monitor investments to meet water consumption reduction targets. Review targets in 2024 (ongoing)</b>	
Status <b>Underway</b>	<b>YEAR 4-10</b>
<b>Council Watercare</b>	

# Strategic Shift 5 | **Water Security**

## Action 5.11 **Pursue pilots, community engagement, technology, and regulations to enable purified wastewater reuse**

Purified wastewater reuse has a part to play in Auckland’s long-term water security. At present, regulatory settings aren’t optimised for sustainable, safe reuse. This is complex issue and requires community buy-in – education and engagement programmes will be important.

This action is a sustained programme of social and technical investigations that build towards using purified wastewater for non-potable uses and investigates direct potable reuse over the coming decades. The investigations would consider te mauri o te wai and Auckland’s cultural context as well as social and technical changes that need to happen before Auckland would receive highly treated wastewater for different uses (for example drinking water). Mana whenua must be part of this conversation.

This will likely take more than a decade and require partnership with central government including Taumata Arowai.

Action 5.11 <b>Pursue pilots, community engagement, technology, and regulations to enable purified wastewater reuse</b> (ongoing)	
Status <b>Underway</b>	<b>YEAR</b> <b>4-10</b>
<b>Council</b> <b>Watercare</b>	

## Strategic Shift 6

# Integrated Land Use and Water Planning

## Integrating land use and water planning at a regional, catchment and site scale

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The council has a critical role to play in delivering water outcomes for the region through its role as the regulator of land use activities. This Strategic Shift sets the direction for Auckland Council to prioritise natural water systems and the health of waterbodies as Auckland grows and redevelops.

Auckland's population growth drives urban growth and land use activity, which puts pressure on the health of our freshwater and coastal environments. Streams have been piped, soils modified, natural wetlands buried, floodplains encroached on, and impervious surfaces increased. This alters the way water naturally flows and contributes to adverse environmental outcomes.

Past and current rural land management practices and land use activities, such as forestry, farming and horticulture also significantly impact the health of water and water ecosystems.

National legislative and policy changes will have a significant impact on future land use planning systems. Resource management reform and the council's response to various National Policy Statements present key opportunities to improve the impact of land uses on the health and wellbeing of water.

The council commits to continuously improving regulatory and non-regulatory instruments to **ensure that water is a central principle** in land management practices and land use planning decision-making, including:

- working proactively with central government to develop new legislative and policy directions and implementing these effectively in Auckland
- improving council strategy, policy and planning instruments
- improving internal processes, and
- working proactively with industry to deliver good practice outcomes in urban development and rural land management.

## Aim

**Water and its life-sustaining capacity is a central principle in land management and planning decisions.** This means:

1. water is recognised as a major determinant in sense of place in Tāmaki Makaurau
2. spatial planning integrates land use, water and infrastructure decision-making
3. the cumulative effects of land use within catchments are understood and managed to protect and enhance mauri
4. avoiding pollutants entering Auckland's waterbodies as a result of land use activities
5. Aucklanders have safe, equitable access and feel connected to healthy, protected blue and green spaces
6. exposure to water-related natural hazard risk decreases over time; growth occurs outside of natural hazard areas and provides appropriate mitigation where this is not practicable, and risks are low
7. Auckland's urban development framework delivers water-sensitive outcomes
8. water-sensitive infrastructure is consistently maintained to a high standard by all asset owners.



## Challenges

1. Capability, capacity, and coordination to implement the Essential Freshwater Package effectively
2. Competing priorities (enabling growth *and* ensuring development protects and enhances ecosystem health)
3. Inconsistencies in how spatial plans treat blue-green areas and water related natural hazards
4. Spatial plans and strategies lack influence in regulatory processes
5. Water related natural hazard risk continues to increase in the existing urban area
6. Ongoing challenges in understanding and managing the cumulative effects of land use activities
7. Growth tends to be developer-led, which coupled with competing priorities and a lack of prescriptive rules, can make it challenging for council to influence the use of holistic water sensitive design processes in urban development
8. The added social, health and environmental values of water sensitive design and life-cycle costs of green infrastructure are not consistently recognised
9. Inconsistent on-ground maintenance of green infrastructure and stormwater assets, particularly when in private ownership

Integrated Land Use and Water Planning Actions		YR
6.1	<b>Embed te mana o te wai as a central consideration in all plan change processes, including the development of council-initiated plan changes and when providing evidence on private plan changes</b>	1-3
6.2	<b>Resource and enhance the council's capability to effectively implement the Essential Freshwater Package</b>	1-3
6.3	<b>Review and improve spatial planning processes to consider water consistently and advocate for statutory weight for structure plans</b>	1-3
6.4	<b>Develop a regional blue-green network spatial plan</b>	1-3
6.5	<b>Develop a position to limit development in, and remove vulnerable structures from, high risk water related natural hazard areas</b>	1-3
6.6	<b>Review, develop and grow the council's Strategic Approach to Sediment Programme</b> (ongoing)	1-3
6.7	<b>Investigate and continuously improve the council's understanding and management of cumulative effects to protect and enhance mauri</b> (ongoing)	1-5
6.8	<b>Avoid further development in water-related natural hazard areas in all plan change processes and ensure regulations take a precautionary and risk-based approach</b> (ongoing)	1-5
6.9	<b>Deliver a package of non-regulatory and regulatory interventions to support the uptake of water-sensitive design processes and ongoing management of devices</b> (ongoing)	1-10

## Strategic Shift 6 | **Integrated Land Use and Water Planning**

### Action 6.1

**Embed te mana o te wai as a central consideration in all plan change processes, including the development of council-initiated plan changes and when providing evidence on private plan changes**

Implementation of the **National Policy Statement for Freshwater Management** (NPS-FM) will deliver a Tāmaki Makaurau interpretation of Te Mana o Te Wai. Te Mana o Te Wai prioritises the health and wellbeing of water bodies and freshwater ecosystems. Te Mana o Te Wai is relevant to all aspects of freshwater management, not just specific aspects relevant to the NPS-FM implementation.

This action will ensure internal processes embed Te Mana o te Wai and the hierarchy of obligations in all internal planning decision making with potential freshwater impacts, including council initiated plan change development and when council provides evidence on private plan changes.

#### Action 6.1

**Embed te mana o te wai as a central consideration in all plan change processes, including the development of council-initiated plan changes and when providing evidence on private plan changes**

Status  
**Scoping**

Owner  
**Council**

**YEAR  
1-3**

### Action 6.2

**Resource and enhance the council’s capability to effectively implement the Essential Freshwater Package**

This action provides for the capability and capacity required to effectively implement the significant regulatory requirements of the Essential Freshwater package. This includes sufficient staff addressing the statutory priorities, upskilling, data management systems, and cross-council coordination to implement the new regulatory requirements, particularly within council’s Regulatory Services division given its organisational responsibility to ensure compliance with regulatory instruments applicable to the Auckland region’s environment.

Additional resourcing support will also need to be considered to aid implementation by rural industries, where appropriate, assuming that their representative groups will also provide key support to their constituents. Council support should include proactive communication campaigns with rural industries, developing guidance, connecting industry with accredited farm plan certifiers and auditors, celebrating community leadership, offering targeted incentives in high opportunity catchments, and providing ongoing land management advice as part of a broader land use catchment approach.

The Essential Freshwater package could be extended in future to address water allocation and associated consenting approaches, although that is not expected in the current term of central government. This would interrelate with other actions within this Implementation Plan.

#### Action 6.2

**Resource and enhance the council’s capability to effectively implement the Essential Freshwater Package**

Status  
**Underway**

Owner  
**Council**

**YEAR  
1-3**

## Strategic Shift 6 | **Integrated Land Use and Water Planning**

### Action 6.3

#### **Review and improve spatial planning processes to consider water consistently and advocate for statutory weight for structure plans**

This action has two components. Firstly, it directs council to investigate and implement opportunities to elevate water sensitive design principles, natural hazard risk management and resilience building in the development of spatial plans. This includes structure plans, area plans, and the Future Development Strategy.

Secondly, it seeks to investigate opportunities to strengthen the statutory weight of spatial plans in the plan change process.

#### Action 6.3

##### **Review and improve spatial planning processes to consider water consistently and advocate for statutory weight for structure plans**

Status  
**Scoping**

Owner  
**Council**

**YEAR  
1-3**

### Action 6.4

#### **Develop a regional blue-green network spatial plan**

The council will develop a regional blue-green network spatial plan for the Auckland region and incorporate into strategies as appropriate, such as the Future Development Strategy.

A blue-green network spatial plan will ensure consistent treatment of blue-green areas across the region when developing other plans and strategies, such as spatial plans or future plan changes. It would be a key lever to deliver on the aim **Aucklanders have safe, equitable access and feel connected to healthy, protected blue and green spaces.**

A blue-green network also has the potential to guide operational work programmes at a local level and ensure these are coordinated to contribute to regional outcomes. For example, site selection for restoration programmes and park services, or aligning greenway, local board plans or local board ngahere action plans. Further work is required to determine the application of the blue-green network at an operational level.

Local boards and community groups have important roles to play in guiding the development and eventual implementation of a blue-green network and can build on the good work to date.

Related to Resource Management Reforms and Future Development Strategy, supports **actions 2.5 and 4.3**. Potentially supported by **action 6.3**.

#### Action 6.4

##### **Develop a regional blue-green network spatial plan**

Status  
**Scoping**

Owner  
**Council**

**YEAR  
1-3**

## Strategic Shift 6 | **Integrated Land Use and Water Planning**

### Action 6.5

#### **Develop a position to limit development in, and remove vulnerable structures from, high risk water related natural hazard areas**

This action directs council to develop a policy position on limiting development in, and removing vulnerable structures from, high risk water related natural hazard areas.

A position statement should direct a consistent and equitable approach to risk and liability of too much water events, including where council intervention may be considered. This policy position is being progressed as part of the council's 'Too Much Water Policy' work programme.

#### Action 6.5

**Develop a position to limit development in, and remove vulnerable structures from, high risk water related natural hazard areas.**

Status  
**Underway**

Owner  
**Council**

**YEAR  
1-3**

### Action 6.6

#### **Review, develop and grow the council's Strategic Approach to Sediment Programme**

This action continues to support the ongoing implementation of council's Strategic Approach to Sediment work programme. This includes reviewing the programme to ensure that it is still fit for purpose, proactively reflects relevant upcoming legislative changes, and explores opportunities to expand its scope, including an additional focus on rural land use activities (for example, forestry, horticulture, pastoral farming, and arable cropping).

#### Action 6.6

**Review, develop and grow the council's Strategic Approach to Sediment Programme (ongoing)**

Status  
**Underway**

Owner  
**Council**

**YEAR  
1-3**

## Strategic Shift 6 | **Integrated Land Use and Water Planning**

### Action 6.7

#### **Investigate and continuously improve the council's understanding and management of cumulative effects to protect and enhance mauri**

This action seeks to improve council's understanding of cumulative effects. This includes continuously improving predictive scenario modelling, such as the types of environmental data inputs, further accounting for periodic high-risk activities (such as open development, harvested forest, crop harvests etc.) and developing integrated harbour and catchment models.

This action also seeks to improve the management of these effects, including investigating opportunities:

- to increase current compliance monitoring capacity through sustainable and equitable funding sources, particularly of permitted activities
- within the current planning framework, which could include reviewing permitted activity thresholds, requiring permitted activity notices, ensuring there are strong objectives and policies for non-complying activities, and that inappropriate activities are prohibited
- to advocate to central government for appropriate tools in the resource management reforms to improve the management of cumulative effects (including cost recovery tools for compliance monitoring)

#### Action 6.7

**Investigate and continuously improve the council's understanding and management of cumulative effects to protect and enhance mauri** (ongoing)

Status  
**Scoping**

Owner  
**Council**

**YEAR  
1-5**

### Action 6.8

#### **Avoid further development in water-related natural hazard areas in all plan change processes and ensure regulations take a precautionary and risk-based approach**

This action has two components. Firstly, it directs council to prevent additional up-zoning within water related natural hazard areas (erosion, land instability, coastal inundation and flooding), where possible. This includes developing internal processes that ensure council-initiated plan change development avoids enabling development in water related natural hazard areas and promotes this as a position when providing evidence on private plan changes.

Secondly, where land is already zoned for intensification within water related natural hazard areas, this action seeks to ensure regulatory controls take a precautionary and risk-based approach. This is being investigated in council's current Resource Management Act s35 reporting. This action seeks to prioritise the natural hazard risk management recommendations of that reporting.

#### Action 6.8

**Avoid further development in water-related natural hazard areas in all plan change processes and ensure regulations take a precautionary and risk-based approach** (ongoing)

Status  
**Underway**

Owner  
**Council**

**YEAR  
1-5**

## Action 6.9

### **Deliver a package of non-regulatory & regulatory interventions to support the uptake of water-sensitive design processes and ongoing management of devices.**

This action has two key components: increasing the effective use of water sensitive design (WSD), and ensuring that structural elements of water sensitive design, such as green infrastructure, are consistently maintained to a high standard by all asset owners. Each component is supported by a suite of sub actions. Further explanation for these sub actions can be found in the Water Strategy supporting document **Investigation of barriers and opportunities to further implement Water Sensitive Design in Auckland** (Ira, 2022).

Improving the effective use of water sensitive design in land use planning:

1. Develop a common, holistic definition of WSD, incorporating water sensitive city and Mātauranga Māori considerations. Incorporate this consistently in council strategy, planning and technical documents
2. Investigate the strengths and weaknesses of the current planning framework from a holistic WSD perspective. Based on this analysis, investigate opportunities for regulatory improvements, including options to mandate WSD principles/practices; provide regulatory incentives; and/or include assessment criteria that considers the holistic benefits of WSD and life cycle assessments of water sensitive devices
3. Develop consistent Auckland Council Group business case templates that include consideration of the added social, health and environmental benefits of WSD, the life-cycle costs of water sensitive devices, and indirect costs (carbon costs, costs of environmental remediation) during option analysis and decision making
4. Investigate sustainable funding systems and financial incentive mechanisms for the use of WSD
5. Develop a water sensitive design rating scheme and celebrate success

6. Develop guidance on retrofitting WSD in brownfield areas
7. Develop detailed design exemplars to support council group staff in assessing what is acceptable long-term as council vested infrastructure
8. Investigate opportunities to increase cross-disciplinary WSD capability and capacity within the development sector (including Te Ao Māori values) through programmes with companies, professional institutions and universities
9. Integrate inhouse WSD expertise across council departments and CCOs
10. Improving the operation and maintenance of water sensitive devices:
  - i. Review Auckland Council and CCO asset databases to ensure consistent information is required at vesting stage across asset owners. Databases should also consistently track inspection and maintenance expenditure. Identify funding sources to improve cross-council group databases, including ICT upgrades if necessary
  - ii. Review council maintenance procedures for green infrastructure and develop maintenance guidelines for maintaining vegetated assets
  - iii. Investigate opportunities in staging and engineering approval processes of vested stormwater assets to ensure assets are adequately maintained and protected during construction of adjacent sites
  - iv. Monitor the ongoing cost effectiveness and performance of different water sensitive devices, taking a life-cycle approach.

## Action 6.9

### **Deliver a package of non-regulatory & regulatory interventions to support the uptake of water-sensitive design processes and ongoing management of devices (ongoing)**

Status  
**Scoping**

Owner  
**Council**

**YEAR**  
**1-10**

## Strategic Shift 7

# Restoring and Enhancing Water Ecosystems

## Taking catchment-based approaches to the health of water ecosystems

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Healthy water ecosystems are vital to our health and wellbeing; if our water is healthy, then our environment and we, the people, are healthy. Our ecosystems give us life, provide and sustain us, and help us connect with nature and our wellbeing.

Many of Auckland's freshwater ecosystems are in poor health, particularly in urban areas. Habitat removal, increased temperature, nutrient enrichment, sedimentation, accumulation of heavy metals and harmful chemicals, rubbish, unmaintained onsite wastewater treatment systems, stream modification, invasive species, and blocked fish passage are among the key drivers of poor ecosystem health in freshwater and coastal ecosystems across the region. Delivering urban development, growth and managing land use without degrading ecosystems is an ongoing and long-standing challenge.

The value of healthy ecosystems is often highly supported in feedback from mana whenua and communities, including in the feedback **Our Water Future - Tō Tātou Wai Ahu Ake Nei** discussion document and support for both the **Water Quality** and **Natural Environment Targeted Rates**.

To deliver on community expectations and restore and enhance the region's water ecosystems, the council needs to transform how it prioritises and takes action. Currently, projects are not always coordinated within catchments, focusing on improving environmental outcomes at a particular site rather than considering the wider benefits across the catchment. Showcase projects such as Te Auaunga Awa (Oakley creek), Te Ara Awataha (Northcote) and now Puhinui stream regeneration are already demonstrating key lessons and opportunities provided by previous restoration projects.

Auckland needs to build on these types of projects and co-ordinate restoration activities on a wider scale to direct investment to areas of greatest need and ensure their long-term ecological stability and success.

Central government directs councils to establish 'freshwater management units' as part of the **National Policy Statement on Freshwater Management**. These are spatial units used for setting policy and taking action. These units represent a key opportunity for the council and its partners – they are a useful organising structure for our collective efforts.

This Strategic Shift commits the council to taking catchment-based approaches to managing water that leverages the new freshwater management units. This means taking a holistic ki uta ki tai / mountains-to-sea approach to freshwater management that aligns with Te Ao Māori and puts te mauri o te wai at the heart of restoring and enhancing water ecosystems.

## Aim

**Auckland has thriving and sustainable natural water ecosystems that support life, food gathering and recreation.** This means:

1. natural water ecosystems are protected, restored, or enhanced so that life is abundant and harvesting practices are possible
2. Auckland takes a catchment-based approach to understanding and improving water ecosystem wellbeing
3. understanding of mauri determines how we prioritise action for freshwater ecosystems
4. funding and incentive frameworks deliver effective restoration and enhancement of water bodies and their ecosystems.

## Challenges

1. Competing priorities of growth and environmental outcomes often result in poor ecosystem outcomes
2. Aligning mātauranga Māori and science to improve the health of Auckland's water
3. Improving knowledge of the ecological state and pressures affecting our water bodies
4. Coordination and alignment of restoration and enhancement projects across the council
5. Financial constraints impacting the success of restoration opportunities.

Restoring and Enhancing Water Ecosystems Actions		YR
7.1	<b>Develop methods to assess mauri for Auckland's freshwater ecosystems, in partnership with mana whenua</b>	1-3
7.2	<b>Develop targets and priorities to improve the mauri of freshwater ecosystems, in partnership with mana whenua</b>	3-5
7.3	<b>Improve our understanding of freshwater ecosystems and pressures</b> (ongoing)	2-5
7.4	<b>Develop an investment framework and strategic investment plan to guide funding and incentive opportunities</b> (ongoing)	4-10
7.5	<b>Take a catchment-based approach to management of waterways protection and enhancement</b> (ongoing)	4-10





## Strategic Shift 7 | Restoring and Enhancing Water Ecosystems

### Action 7.1

#### Develop methods to assess mauri for Auckland's freshwater ecosystems, in partnership with mana whenua

The foundation of mauri-enhancing action is a deep understanding of local water ecosystem health. Understanding the health and wellbeing of Auckland's water, or mauri of water, is central to the protection, restoration and enhancement of our water bodies and freshwater ecosystems. To move towards the vision of the Water Strategy, the council and mana whenua need an agreed understanding of what healthy water/mauri looks like, supported by robust frameworks to guide decisions and actions.

Indicators will need to encompass mātauranga and align with national and regional aspirations but be flexible to allow for local expression of te mauri o te wai (for example, the abundance of taonga species within a rohe or catchment).

The development of methods to assess mauri for Auckland's freshwater ecosystems will need to be supported by a shared monitoring programme. Mana whenua will be key partners in the generation and collection of data on the mauri of our water, with skills, knowledge and responsibilities shared between participants in monitoring programmes.

This action is closely related to **action 3.1**.

#### Action 7.1

#### Develop methods to assess mauri for Auckland's freshwater ecosystems, in partnership with mana whenua

Status  
**Scoping**

Owner  
**Council**

**YEAR  
1-3**

### Action 7.2

#### Develop targets and priorities to improve the mauri of freshwater ecosystems, in partnership with mana whenua

Using the agreed methods to assess mauri (**action 7.1**), partner with mana whenua to agree targets and priorities to improve the health and wellbeing of freshwater ecosystems.

Targets and priorities will need to take a *ki uta ki tai / mountains to the sea* approach, considering key threats to the health of our water across catchments. This includes land use changes, effects of key contaminants, spatial distribution and connectedness of ecological corridors and blue-green networks, and changes to climate over time.

These targets and priorities will need to be scalable, and able to be measured and expressed at a regional level, as well as at a local/catchment level in consultation with local iwi within their rohe. The above targets and priorities will be published and reported on regularly, building on established platforms, such as Mātauranga Māori Benchmarking Framework, current State of the Environment reporting, and implementation of NPS-FM.

#### Action 7.2

#### Develop targets and priorities to improve the mauri of freshwater ecosystems, in partnership with mana whenua

Status  
**Scoping**

Owner  
**Council**

**YEAR  
3-5**

## Strategic Shift 7 | Restoring and Enhancing Water Ecosystems

### Action 7.3

#### Improve our understanding of freshwater ecosystems and pressures

Improving our understanding of freshwater ecosystems, the state of the indigenous species within them, and the cumulative impacts of multiple threats, will help direct action and enable greater visibility and rules to manage and enhance freshwater ecosystems. This needs to include

- i. the distribution and abundance of indigenous freshwater species
- ii. the extent of rare ecosystems and threatened species
- iii. barriers to connectivity and migration (including fish passage)
- iv. scope of invasive pest species (spatial and impacts), building on the Auckland Regional Pest Management Plan
- v. extent and impacts of associated terrestrial ecosystems or land on freshwater values (for example, riparian forest cover and extent and management zones to prevent sediment runoff).

This would require an initial desktop exercise to identify and map significant freshwater ecosystems, followed by validation through field surveys.

#### Action 7.3

#### Improve our understanding of freshwater ecosystems and pressures (ongoing)

Status  
**Scoping**

Owner  
**Council**

**YEAR  
2-5**

### Action 7.4

#### Develop an investment framework and strategic investment plan to guide funding and incentive opportunities

The council will establish processes to assess the effectiveness of investment in restoring and enhancing water bodies. This direct investment to areas of greatest benefit/return as well as identify collaboration and co-ordination opportunities to ensure projects are complementary.

A freshwater investment framework will enable Auckland Council to:

- i. evaluate the overall effectiveness of freshwater investment, using financial and non-financial measures (such as water body health and amenity value)
- ii. identify opportunities for collaboration and co-ordination
- iii. improve public understanding of freshwater clean-up efforts
- iv. implement processes that ensure benefits of freshwater clean-up projects are maintained after funding ends.

Using the targets and priorities (action 7.2) and above framework will inform the development of a strategic investment plan that identifies priority actions for investment.

#### Action 7.4

#### Develop an investment framework and strategic investment plan to guide funding and incentive opportunities (ongoing)

Status  
**Not started**

Owner  
**Council**

**YEAR  
4-10**

## Strategic Shift 7 | **Restoring and Enhancing Water Ecosystems**

### Action 7.5

#### **Take a catchment-based approach to management of waterways protection and enhancement**

This approach will ensure that catchment-scale outcomes for water bodies, including those attributable to cumulative effects, are prioritised, and enhanced within the council’s plans and frameworks.

A catchment-based approach will result in more joined-up thinking across the council group when evaluating interventions (regulatory and non-regulatory) so that outcomes are not undermined by other activities in a catchment. It will require the council to create, hold and make readily available information on catchment-scale waterbody assessments to support restoration and enhancement activities.

To achieve this change, the council needs to establish processes for engaging with mana whenua, communities, and stakeholders on freshwater management within catchments.

Action 7.5

**Take a catchment-based approach to management of waterways protection and enhancement** (ongoing)

Status

**Not started**

Owner

**Council**

**YEAR  
4-10**

## Strategic Shift 8

# Pooling Knowledge

## Fostering a shared understanding enabling better decisions for our water future

The challenges of the next 30 years require improved water knowledge stewardship by the council family. The council has a legislated responsibility to manage the health of the region's waterbodies in partnership with mana whenua and through consultation with the community. Sustainable management of water relies on the evidence base that the council develops and shares. The council and communities need fit-for-purpose information to make the right decisions and investments for our changing water future.

The council needs a robust, well-linked, knowledge base that enables evaluation of the health of the region's waterbodies and the council's regulatory and non-regulatory actions to continuously assess whether management approaches and investments are achieving water outcomes over the long term.

The council needs better coordinated data collection, information management and knowledge creation so that the evidence base for future decision making is robust. The council needs to actively coordinate information generation and sharing to drive improved outcomes.

## Aim

**Auckland has the knowledge about water to make good quality, timely, and strategic decisions about water.** This means:

1. Aucklanders can readily access and contribute to the council's data, information, and knowledge
2. the council values, understands, and aligns with Te Ao Māori knowledge for Auckland's waters
3. the council is a future-focused leader in innovation in the delivery of water outcomes

4. the council is a collaborative organisation with a strong culture of holistic planning, action, reporting and post-implementation review cycles.

## Challenges

1. Adequately addressing iwi rights and interests in a post-settlement era through strengthened knowledge sharing
2. Public expectations about the quality and effectiveness of local government planning, monitoring and enforcement, to achieve improved environmental outcomes
3. Tensions over how water resources are allocated, used, and conserved, and conflicts between values for resource uses
4. Increasing expectations for the council to rapidly respond to needs for water body health assessments
5. Internal barriers to knowledge sharing across the council group when increased data sharing and digestible insights are required.

Pooling Knowledge Actions		YR
8.1	<b>Implement a council group knowledge governance framework for water</b> (ongoing)	1-3
8.2	<b>Build a robust evidence base to support the National Policy Statement for Freshwater Management plan change in 2024.</b>	1-3
8.3	<b>Develop a consistent council approach to working with treaty partners and their mātauranga</b>	1-3
8.4	<b>Evaluate and where required improve 'whole of policy cycle' environmental management across the council group</b> (ongoing)	4-10
8.5	<b>Enable Aucklanders' ability to readily access and contribute to water data, information, and knowledge</b> (ongoing)	4-10
8.6	<b>Develop external partnerships for innovation, research, and development</b> (ongoing)	4-10

## Strategic Shift 8 | Pooling Knowledge

### Action 8.1

#### Implement a council group knowledge governance framework for water

The council will develop a framework to facilitate a culture change across the council group, encouraging the sharing of knowledge across departments and organisations, and better connecting teams in the ownership of knowledge and insights.

Implementing a consistent council group Knowledge Governance Framework is a critical action considering central government’s **Three Waters Reform**. This is because the council is at risk of losing information –or ready access to information sources –it requires to perform statutory duties. A Knowledge Governance Framework should identify approaches to knowledge sharing, transitional arrangements, and asset transfer.

Principles for the knowledge governance framework review are:

**Participatory:** to build confidence in actions from parties involved

**Transparent and accountable:** information flows freely through Auckland Council, and steps taken in policy development are visible to all

**Integrative:** integration recognises linkages within the environmental management system

**Coherent and aligned:** requires political and organisational leadership for consistent approaches

**Efficient:** transaction costs minimised, including financial and time costs

**Adaptive:** system incorporates collaborative learning, is responsive to changing pressures and values, and anticipates and manages threats, opportunities, and risks

**Competent:** requires development of capability at all levels: skills, leadership, experience, resources, knowledge, social learning, systems

Auckland’s knowledge governance framework will need to consider:

Consideration	Description
<b>Guidance</b>	Have a desired direction and identify the drivers of change to knowledge
	Knowing what knowledge exists, where to look for it, and how to find it
	Assess the various data and information types we hold, and the benefits and limitations of each, and how they contribute to our wider knowledge base
	Clear roles and responsibilities for knowledge management and use
	Determine capability and capacity requirements to deliver a more joined-up knowledge sharing culture for water knowledge across the council group
<b>Processes</b>	A clear process and programme of work to identify, prioritise and fill knowledge gaps
	Knowledge management standards for managing different knowledge practices, including, mātauranga Māori, western knowledge, and lived experience
	Capture data and knowledge in a consistent and searchable manner
	Protocols for sharing and access to data and knowledge, connecting knowledge experts to decision-makers and end-users
<b>Continuous improvement</b>	Embed continuous improvement and feedback loops into knowledge management to improve decision making
	Assess the impact of knowledge management on organisational performance

Action 8.1

**Implement a council group knowledge governance framework for water** (ongoing)

Status  
**Scoping**

Owner  
**Council**

**YEAR  
1-3**

## Strategic Shift 8 | Pooling Knowledge

### Action 8.2

#### Build a robust evidence base to support the National Policy Statement for Freshwater Management plan change in 2024

A programme of work is underway to implement the **National Policy Statement for Freshwater Management** (NPS-FM), which culminates in a plan change in 2024. Implementation puts additional data and knowledge generation requirements on the council to:

1. deliver a more holistic approach to the monitoring of freshwater ecosystem health
2. provide the evidence base that will be needed to support the 2024 plan change, which will introduce a new limits-based freshwater management system for Auckland.

The NPS-FM plan change will define clear water ecosystem goals for the region, setting a strong foundation for the future resource management system and local government reform discussions. In doing so it will also provide agreed water objectives to guide any new 3-waters entity.

To deliver this programme of work effectively and in a timely manner to support the NPS-FM implementation, the council will need to ensure additional resourcing is prioritised for water monitoring and knowledge generation. This work programme also requires significant leadership and coordination effort across the organisation.

#### Action 8.2

#### Build a robust evidence base to support the National Policy Statement for Freshwater Management plan change in 2024.

Status  
**Scoping**

Owner  
**Council**

**YEAR**  
**1-3**

### Action 8.3

#### Develop a consistent council approach to working with treaty partners and their mātauranga

Auckland Council needs strong reciprocal knowledge-sharing and knowledge-generation relationships with mana whenua across the region. Mana whenua hold the mātauranga (knowledge) that will support council working towards *te mauri o te wai o Tāmaki Makaurau*.

The council needs an agreed approach to working in partnership with mana whenua and their mātauranga that considers:

- knowledge governance and alignment with other council approaches
- continuous learning principles
- resourcing and support for sustained relationships, including requirements for formal arrangements
- protocols for publication and sharing, including consideration of intellectual property rights.

#### Action 8.3

#### Develop a consistent council approach to working with treaty partners and their mātauranga

Status  
**Scoping**

Owner  
**Council**

**YEAR**  
**1-3**

## Strategic Shift 8 | **Pooling Knowledge**

### Action 8.4 **Evaluate, and where required, improve ‘whole of policy cycle’ environmental management across the council group**

To identify what evaluation is most needed (e.g. high value, high impact policies and work programmes such as the Auckland Unitary Plan and the Water Quality Targeted Rate).

This action will support the council’s ability to understand and share the impacts of its decisions for water and ecosystem health and enable evidence-based decision making, resource allocation and policy making on water across the organisation. This includes internal council systems for data management and business processes to support ongoing improvement of decision making and policy making.

Knowledge generated through evaluation processes will be made transparently available, shared, and form part of a feedback process that enables continual improvement practises.

Action 8.4  
**Evaluate, and where required, improve ‘whole of policy cycle’ environmental management across the council group** (ongoing)

Status  
**Not started**

Owner  
**Council**

**YEAR  
4-10**

### Action 8.5 **Enable Aucklanders’ ability to readily access and contribute to water data, information and knowledge**

Aucklanders play a vital role in building the knowledge base of our water. Transparent information sharing with Aucklanders empowers them to interact and engage with their local rivers, lakes and streams. In return, members of the public and community groups generate significant amounts of data and information through citizen science and community restoration projects.

This action requires the council to:

- provide conduits for community interaction with water knowledge via open access and online data
- coordinate the various information sharing platforms the organisation already operates
- invest in a continual improvement process for the digital platforms
- partner with others to develop insights and data visualisation and communication capability (see Action 8.4).

Action 8.5  
**Enable Aucklanders’ ability to readily access and contribute to water data, information and knowledge** (ongoing)

Status  
**Not started**

Owner  
**Council**

**YEAR  
4-10**

# Strategic Shift 8 | **Pooling Knowledge**

## Action 8.6 **Develop external partnerships for innovation, research, and development**

The council seeks to adopt and apply the best knowledge generation methods and tools wherever it is able. To do this the council, with partners, innovates, and creates new products that enable the council to better manage and take care of Auckland’s waters.

To do so, the council needs to formalise, grow and develop its approach to external partnerships for research and innovation for water.

This action requires establishment of strategic priorities for external partnerships, research, and innovation for water for the council group (for example, new technologies adoption). Then, partnership with key research institutes and government organisations on research, development, and innovation.

Action 8.6  
**Develop external partnerships for innovation, research, and development** (ongoing)

Status  
**Not started**

Owner  
**Council**

**YEAR**  
**4-10**



# Appendix 1:

## Summary of Actions

		YR	Owner	status
<b>Te Tiriti Partnership Actions</b>				
1.1	<b>Apply dual framework to benchmark water outcomes</b>	1	Council	Underway
1.2	<b>Resource mana whenua to enable meaningful partnership relationships with the council</b> (ongoing)	2-3	Council	Scoping
1.3	<b>Report on te mauri o te wai</b> (ongoing)	2-3	Council	Scoping
1.4	<b>Resource mana whenua to lead environmental monitoring</b> (ongoing)	2-10	Council	Scoping
1.5	<b>Create further partnership mechanisms with mana whenua</b>	4-10	Council	Not started
1.6	<b>Enable and support co-governance arrangements where appropriate</b>	4-10	Council	Not started
<b>Empowered Aucklanders Actions</b>				
2.1	<b>Develop and deliver a framework for, and measure, water literacy at regular intervals</b> (ongoing)	1-3	Council and Watercare	Scoping
2.2	<b>Grow council group's water literacy education programmes</b> (ongoing)	1-3	Council and Watercare	Scoping
2.3	<b>Resource mana whenua to lead community engagement for water projects in catchments in their rohe</b> (ongoing)	1-3	Council	Scoping
2.4	<b>Align, coordinate, resource and evaluate the council group's community engagement on water</b>	1-3	Council	Scoping
2.5	<b>Develop a measure of Aucklanders' access to blue-green spaces; a programme to increase access over time; and track progress</b> (ongoing)	1-3	Council	Scoping
2.6	<b>Investigate community-based ownership models for water infrastructure and services</b>	1-3	Council	Scoping
2.7	<b>Set targets for and implement empowered communities' approach for water projects across the council group</b> (ongoing)	4-10	Council and Watercare	Not started
2.8	<b>Review the council group's resilience-building programmes for effectiveness, and define and measure community resilience overtime</b>	4-10	Council and Watercare	Not started

		YR	Owner	status
<b>Sustainable Allocation and Equitable Access Actions</b>				
3.1	<b>Develop indicators based on mauri to define allocation limits, in partnership with mana whenua</b>	1-3	Council	Scoping
3.2	<b>Assess Auckland's water resources and availability across the region using a Tāmaki expression of the Te Mana o Te Wai hierarchy</b> (ongoing)	1-3	Council	Scoping
3.3	<b>Develop a dynamic water availability model and use it to plan for the future</b> (ongoing model development)	1-5	Council	Scoping
3.4	<b>Set take limits and review allocation rules for National Policy Statement on Freshwater Management using the Tāmaki expression of the Te Mana o Te Wai hierarchy</b>	1-5	Council	Underway
3.5	<b>Understand the mauri of existing water sources where water is extracted for use, in partnership with mana whenua.</b>	4-10	Council	Not started
3.6	<b>Create a smart allocation system through increased monitoring and data analysis</b>	4-10	Council	Not started
<b>Regenerative Water Infrastructure Actions</b>				
4.1	<b>Collate case studies to increase understanding of resilient, conspicuous, and mauri-enhancing water infrastructure solutions</b> (complete)	✓	Complete	Complete
4.2	<b>Review emissions reductions for water infrastructure against those required by Te-Tāruke-a-Tāwhiri and develop an emissions plan</b>	1-3	Council and Watercare	Underway
4.3	<b>Resource mana whenua to develop guidance and assessment methods for mauri-enhancing infrastructure</b>	2-3	Council	Scoping
4.4	<b>Assess and map impacts of existing water infrastructure on te mauri o te wai, in partnership with mana whenua</b>	2-3	Council	Scoping
4.5	<b>Evaluate and map resilience of the council's water infrastructure systems</b>	2-3	Council	Scoping
4.6	<b>Partner with mana whenua to pilot water infrastructure projects that enhance te mauri o te wai</b> (ongoing)	2-3	Council	Scoping
4.7	<b>Include mauri in the council's investment prioritisation process for the Annual Budget and Long-Term Plan in partnership with mana whenua</b> (ongoing)	2-3	Council	Scoping

		YR	Owner	status
<b>Water Security Actions</b>				
5.1	<b>Adopt a council position to address affordable water access</b>	1	Council	Underway
5.2	<b>Develop a plan to address affordable water access in Auckland</b>	1	Council and Watercare	Scoping
5.3	<b>Add a level of service for and develop a plan to proactively manage both peak demand and drought response</b>	1-3	Council and Watercare	Scoping
5.4	<b>Model climate change scenarios to understand impacts on water sources</b> (ongoing)	1-3	Watercare	Underway
5.5	<b>Develop a smart demand management system to predict and manage peak demand using smart meter data and associated communication tools to engage Aucklanders</b> (ongoing)	2-5	Watercare	Scoping
5.6	<b>Support central government to set targets for water efficient homes</b> (ongoing)	2-3	Council and Watercare	Scoping
5.7	<b>Develop an investment plan for diverse sources to meet 2030 and 2050 targets, guided by te mauri o te wai for 2024 Long-Term Plan</b>	2-3	Council and Watercare	Scoping
5.8	<b>Develop policy to achieve target of 30% of urban roof area to collect rainwater for use</b> (ongoing)	2-5	Council	Scoping
5.9	<b>Develop regulations and targeted information to support Aucklanders to increase water capture for reuse (homes and businesses)</b>	2-5	Council and Watercare	Scoping
5.10	<b>Monitor investments to meet water consumption reduction targets. Review targets in 2024</b> (ongoing)	4-10	Council and Watercare	Underway
5.11	<b>Pursue pilots, community engagement, technology, and regulations to enable purified wastewater reuse</b> (ongoing)	4-10	Council and Watercare	Underway
<b>Integrated Land Use and Water Planning Actions</b>				
6.1	<b>Embed te mana o te wai as a central consideration in all plan change processes, including the development of council-initiated plan changes and when providing evidence on private plan changes</b>	1-3	Council	Scoping
6.2	<b>Resource and enhance the council's capability to effectively implement the Essential Freshwater Package</b>	1-3	Council	Underway
6.3	<b>Review and improve spatial planning processes to consider water consistently and advocate for statutory weight for structure plans</b>	1-3	Council	Scoping
6.4	<b>Develop a regional blue-green network spatial plan</b>	1-3	Council	Scoping
6.5	<b>Develop a position to limit development in, and remove vulnerable structures from, high risk water related natural hazard areas</b>	1-3	Council	Underway

		YR	Owner	status
6.6	<b>Review, develop and grow the council's Strategic Approach to Sediment Programme</b> (ongoing)	1-3	Council	Underway
6.7	<b>Investigate and continuously improve the council's understanding and management of cumulative effects to protect and enhance mauri</b> (ongoing)	1-5	Council	Scoping
6.8	<b>Avoid enabling further development in water-related natural hazard areas in all plan change processes and ensure regulations take a precautionary and risk-based approach</b> (ongoing)	1-5	Council	Underway
6.9	<b>Deliver a package of non-regulatory and regulatory interventions to support the uptake of water-sensitive design processes and ongoing management of devices</b> (ongoing)	1-10	Council	Scoping
<b>Restoring and Enhancing Water Ecosystems Actions</b>				
7.1	<b>Develop methods to assess mauri for Auckland's freshwater ecosystems, in partnership with mana whenua</b>	1-3	Council	Scoping
7.2	<b>Develop targets and priorities to improve the mauri of freshwater ecosystems, in partnership with mana whenua</b>	3-5	Council	Scoping
7.3	<b>Improve our understanding of freshwater ecosystems and pressures</b>	2-5	Council	Scoping
7.4	<b>Develop an investment framework to guide funding and incentive opportunities</b> (ongoing)	4-10	Council	Not Started
7.5	<b>Take a catchment-based approach to management of waterways protection and enhancement</b> (ongoing)	4-10	Council	Not started
<b>Pooling Knowledge Actions</b>				
8.1	<b>Implement a council group knowledge governance framework for water</b> (ongoing)	1-3	Council	Scoping
8.2	<b>Build a robust evidence base to support the National Policy Statement for Freshwater Management plan change in 2024.</b>	1-3	Council	Scoping
8.3	<b>Develop a consistent council approach to working with treaty partners and their mātauranga</b>	1-3	Council	Scoping
8.4	<b>Evaluate and where required improve 'whole of policy cycle' environmental management across the council group</b> (ongoing)	4-10	Council	Scoping
8.5	<b>Enable Aucklanders' ability to readily access and contribute to water data, information, and knowledge</b> (ongoing)	4-10	Council	Not started
8.6	<b>Develop external partnerships for innovation, research, and development</b> (ongoing)	4-10	Council	Not started

[Te reo headline here]

# Glossary

## Te Reo Māori

Word or Term	Explanation
Awa	River
Iwi	Tribe
Kaitiaki	Guardian
Kaitiakitanga	Guardianship
Mahinga Kai	Generally refers to freshwater species that have traditionally been used as food, tools or other resources. It can also refer to the places those species are found and to the act of catching them.
Mana Motuhake	Self-determination, autonomy and control.
Mana whenua	Māori with ancestral relationships in certain areas in Tāmaki Makaurau where they exercise customary authority. Mana whenua hold a special and unique place in the identity and life of Tāmaki Makaurau.
Mataawaka	Māori living in Tāmaki Makaurau (the Auckland region) who do not form part of a mana whenua group, and whose ancestral links lie outside of Tāmaki Makaurau.
Mātauranga Māori	Māori knowledge, including the Māori worldview.
Mauri	Life force, the essential quality and vitality of a being or entity. It is also the life-sustaining capacity of an entity.
Rohe	Territory
Taiao	The natural world, environment, nature.

Word or Term	Explanation
Tangata whenua	People of the land (Māori).
Taniwha	Water spirit, powerful creature. They are often regarded as guardians by the people who live in their territory, but may also have a malign influence on human beings.
Tipua	Supernatural creature or spirit.
Wai	Water. Wai also refers to stream, creek, river.
Whakapapa	An important concept that establishes kinship and status, and confers rights and responsibilities.

[Te reo headline here]

## English

Term	Explanation
Drinking Water	<p>One of the 'three waters'; refers to water supply that is treated and safe for human consumption.</p> <p>The water supply system is an interconnected system of built water network, treatment plants, natural environments and sources.</p>
Wastewater	<p>One of the 'three waters'; refers to water that has been used in the home, in a business, or as part of an industrial process.</p> <p>The wastewater system is a piped network and treatment plants.</p>
Stormwater	<p>One of the 'three waters'; refers to surface runoff which is water that accumulates on the ground when it rains and flows downhill.</p> <p>Urban run-off, such as from roads, is channeled into the 'open network' stormwater drainage system. the stormwater 'system' includes the built stormwater network, natural waterways, overland flow paths, and coastal receiving environments.</p>

Term	Explanation
Demand management	A suite of policies or measures to reduce water consumption by both residential and non-residential customers.
Non-potable water	Water that is not safe for humans to drink.
Potable water	Water treated to a standard that is suitable for human consumption; it is often referred to as 'drinking water'.
Regenerative infrastructure	Infrastructure that responds to, works with, and enhances natural systems.
Smart-meter	A 'new generation' water meter that communicates water consumption to a computerised reader.
Water recycling	The retreatment of water already used for one purpose to a standard that is fit for one or more subsequent purposes. Where the purpose does not require potable-standard water, such as industrial cooling or irrigation, the use of recycled water reduces demand on the potable water supply.

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