



**Tō tātau Anamata Waimāori  
Te whakarāpopototanga o te  
Aromatawai Wai ā-Rohe**

**Our Freshwater Future**



*Dried up Waipawa River in November 2018*



*E kore tātau e mōhio te whakatohu  
nui o te wai, kia mimiti rawa te puna.*

*We will never know the true value of  
water until the spring runs dry.*

*E puna wai, he puna ora.*

*Me tiakina e tātou.*

*I te tīmatanga ko te pō, Tē puta ai ngā tamariki ā Ranginui  
rāua ko Papatuanuku I taua pō. Ka hui ngā tamariki, ka haere  
a Tāne- te-Waiora, ka whakatāukehia ōna mātua kia kuhu  
mai te rā. Kā rongo te pō, kā rongo te ao Tihei-mauriora.*

*Ka ora tātou I te wai  
He puna wai, he puna ora  
Ki te kore te wai, ka kore hoki tātou*

*Mē tiakina  
Kei hea a Rātā, kei hea a Kowhai,  
kei hea a Kākā, kei hea a Kōkako,  
E kii ana te kōrero, kei te mimiti haere anō koutou*

*E koro tuna kaua e tangi,  
E kui koura kei hea koe?  
He puna wai, he puna ora*

*Ka whānau mai he pēpi ki tēnei ao, ka ora taua pēpi I ngā waiū me te  
aroha a tōna māmā*

*Ka kino nei te toto, me whakakōhua te Kawakawa ki roto wai wera, tāpiri  
atu kō ngā karakia anō hoki, kia ora ai anō te tūrora*

*Ka māuiui, ka taumaha te wairua o te tangata, ko te wai anō me ngā  
karakia kei te kaupare atu I ngā kino*

*I te taenga mai o te waka Tākitimu ki konei. I tū ngā pā ki te taha o ngā  
awa, kia tata ai ki ngā māra kai hei whāngai I te Iwi. I tutū ano te puehu  
mō ēnei rawa nunui mō te whenua me te wai.*

*Inaianei kua iti haere, no reira me tiakina e tātou,  
kia ora ai ngā whakatipuranga.*

*E kore tātou e mōhio te whakatohu nui o te wai kia  
mimiti rawa I te puna. He puna-wai, he puna ora.*

*This kōrero tairitenga  
(symbolic poem) is provided  
by Hawke's Bay Regional  
Council Senior Advisor -  
Māori, Te Rangihau Gilbert*

*A well spring of water, a well spring of life.  
We need to protect this taonga.*

*In the beginning, there was darkness and the children of Ranginui and Papatūānuku dwelt in darkness. But they could not grow, so Tāne-Te-Waiora encouraged by his siblings, separated his parents and let in the light. And from the light came new life.*

*Water feeds that life,  
Water is life,  
Without water we cannot live.*

*That precious life needs our protection.  
Where is Rātā, where is Kōwhai.  
Where is Kākā, where is Kōkako.  
They say you are endangered now.*

*Grandfather tuna don't cry.  
Grandmother kōura where are you?  
Water is life.*

*A pregnant mother who gives birth, brings new life into the world.  
Mother's milk and her love nurture baby.*

*When blood is poisoned, it is the water of the Kawakawa that supports it to heal.*

*When the Spirit of a person is hurting, the sacred waters lift the burden.*

*When Tākitimu waka pulled up on the shores of Te Matau a Māui, it was freshwater our people sought.*

*It was near the awa they made their home.*

*Our people watered crops from it and fought wars over it and the fertile lands it feeds.*

*Today, we seek to protect the wai, so future generations can fish for tuna, swim in the awa and grow food for our people.*



# Tō tātau Anamata Waimāori – He kupu nā te Heamana Our Freshwater Future - Message from the Chair

*Our region has challenging times ahead, as climate change puts pressure on our environment, our communities, and our economy.*

We've seen first-hand how the two extremes of climate change impact on water in Hawke's Bay in the last five years, facing two years of severe drought and a devastating cyclone during our wettest year on record.

We also see the impacts of decades of a first-in-first-served regime for allocating natural resources, including water.

We need to change the way we value this precious taonga, how we use it and how we ensure there's enough to go around. And we need to do it soon.

It will take courage to make decisions that help our community navigate that difficult transition.

We are guided by Central Government's Te Mana o te Wai, a framework that sets a clear hierarchy for how we manage freshwater to ensure Hawke's Bay has long-term, climate-resilient, and secure supplies of freshwater, *for all*.

It puts the health of the wai/water first, then the hauora/health of our community – and only after those needs are met, can other uses be considered. Te Mana o te Wai also puts the community and mana whenua at the forefront of the korero.

We are at a pivotal point in our history, where we need to think carefully about how we protect our environment for future generations.

Cyclone Gabrielle has only increased the urgency for our region to make good decisions about ensuring our environment, our communities and our economy are resilient to the impacts of climate change on water – whether that's too much or not enough.

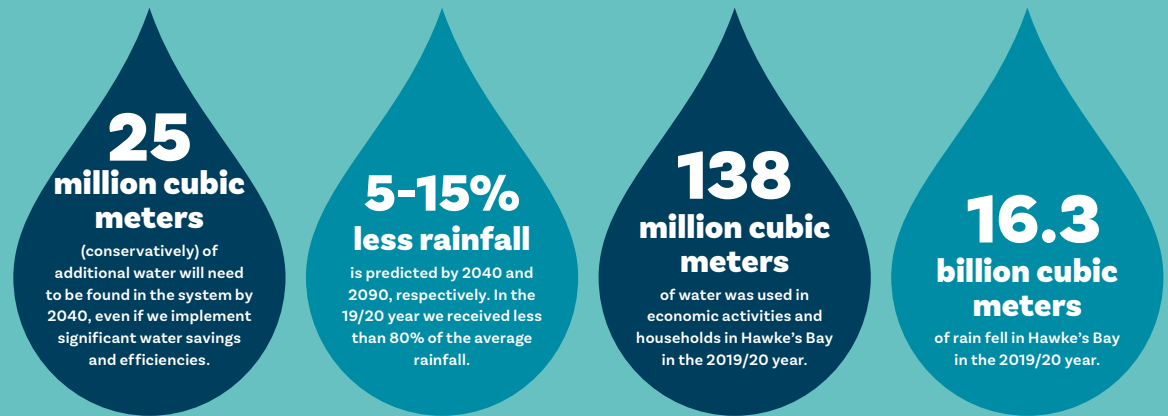
I am pleased to share the Hawke's Bay Regional Water Assessment, and this easy-to-read summary of that report, which provides baseline data and options for making those bold decisions. Now it's up to us, the community, to decide our freshwater future.



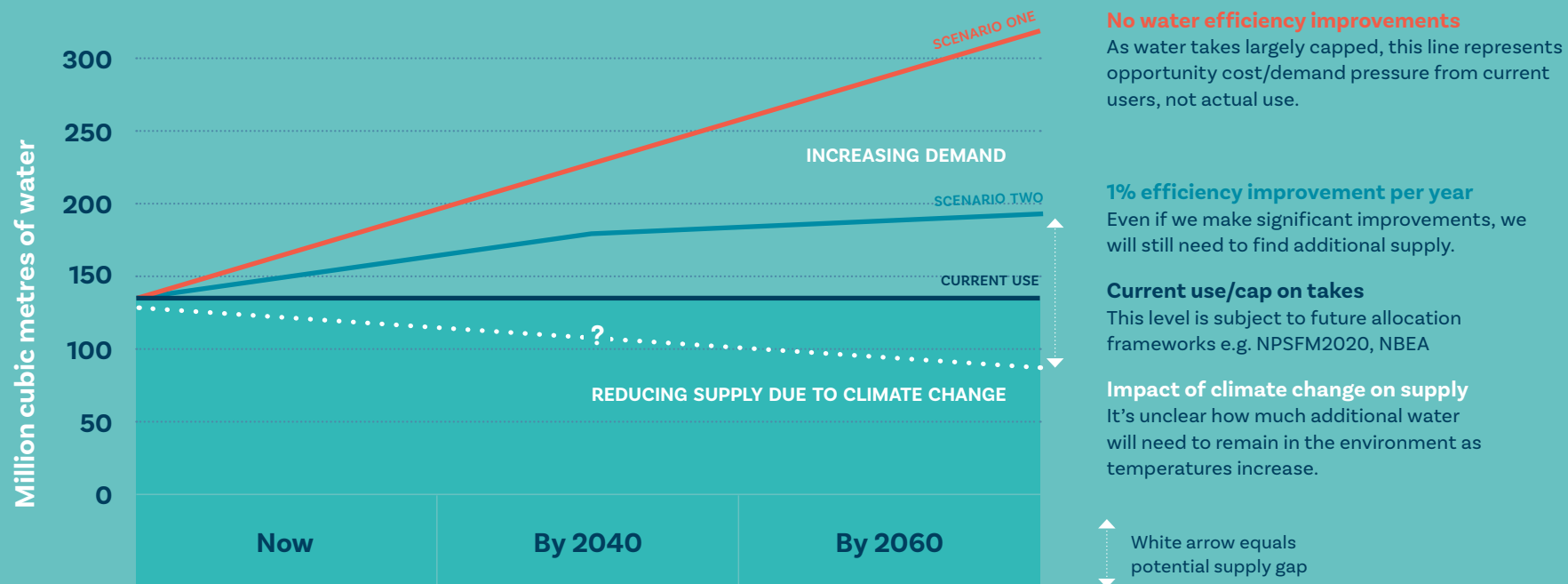
**Hinewai Ormsby**  
Chair, Hawke's Bay  
Regional Council

# He karapatanga ki te Aromatawai Wai ā-Rohe

## Regional Water Assessment at a glance



### Growing gap between the future supply and demand of freshwater



# Te koronga o te puka

## Document purpose

*Our Freshwater Future is an easy-to-read summary of the Hawke's Bay Regional Water Assessment (RWA) report.*

The purpose of Our Freshwater Future is to inform future community discussions and to guide regional decision-making on freshwater policy, processes and interventions that will be made through a variety of regional and district council mechanisms, including Regional Council's freshwater plan and regional spatial plans. What the challenge of water security is and what options we have to ensure "Hawke's Bay has long-term, climate-resilient, and secure supplies of freshwater, for all".

Our Freshwater Future is not a consultation document but a starting point for conversations. Any significant water security intervention options for reducing demand or increasing supply would need community support and would be consulted on prior to adoption.

You can find the Hawke's Bay Regional Water Assessment here:

**hbrc.govt.nz search: #watersecurity**



# Tā te Aromatawai Wai ā-Rohe i tūhura ai What the Regional Water Assessment investigated

*Work done by the National Institute of Water and Atmospheric Research (NIWA) shows that rivers in the Heretaunga and Central Hawke's Bay catchments will be some of the worst hit by climate change in Aotearoa New Zealand.*

We needed more information to determine what those impacts are likely to be and how we might address them in future to protect our access to freshwater.

The Regional Water Assessment is the first region-wide account of water in Aotearoa New Zealand, using the UN System of Environmental-Economic Accounting - Water (also referred to as SEEA-Water). The report uses the July 2019-June 2020 as a baseline for the Hawke's Bay region, a year that was particularly dry so is a useful proxy for the climate change impacts we are likely to face in future.

The report explored the water security challenges facing the region, changes to national policy for water, mahi the Regional Council is doing to improve water security, the science behind our water, and investigated:

- How much water do we have now?
- How much water are we using now and who is using it?
- How much water might we have in future?
- How much water might we use in future?
- How can we better manage demand?
- What options do we have to increase supply?



# Te wero whakamaru wai

## The water security challenge

*Hawke's Bay is blessed with bountiful sunshine, rich soils, and accessible freshwater. We've built our communities and economy around these advantages. In the past, we treated natural resources, including water, as if they were practically endless but we now know that's not the case. Climate change and increasing demand are putting our water security at risk.*

While some communities are already facing the impacts of climate change on water security, the Regional Council's work shows that if we don't significantly change how we manage water, we will all feel the impacts on our environment, communities, and economy. If we don't plan for water security, we are likely to see:

### Environment:

- Water levels in rivers, streams and aquifers falling in summer due to reduced rainfall and increasing temperatures, meaning more water will need to be retained in the environment;
- More volatile rainfall across all the seasons, leading to more extreme events causing serious flooding, slips and erosion. Despite that, we'll have less rain overall;

### Communities:

- Dropping river and aquifer levels could see more shallow rural bores run dry and urban supply under pressure;
- Reducing access to water impacting social and cultural values – widening the gap between those who have water and those who don't;


### Economy:

- Reducing volumes of water available to our world-class primary sector, which employs a significant portion of Hawke's Bay population;
- Increasing pressure on horticulture, agriculture and industry, to reduce how much water they use;
- Reducing regional investment due to uncertainty around future water supplies.

### What is water security?

The United Nations defines water security as “The capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being, and socio-economic development ...”





*"We need to pull every lever we have to radically reduce our demand for freshwater - through technology, behaviour, and allocation."*

Regional Water Assessment

# Te wai puta noa i Aotearoa

## Water across Aotearoa

*The context for freshwater management across Aotearoa New Zealand is changing quickly.*

Central Government's freshwater principle, Te Mana o te Wai, guides how Aotearoa New Zealand manages freshwater – directing regulators and users to put the health of water first. Only once the needs of the environment, then human health are met, can water be allocated to the wellbeing of people and communities – socially, culturally and economically.

This is being implemented through the National Policy Statement for Freshwater Management (NPSFM) and regional councils are required to notify proposed provisions for freshwater planning by the end of 2024. Hawke's Bay Regional Council will soon develop a freshwater plan to incorporate into its regional plan.

Every regional council must “give effect to Te Mana o te Wai”, including engaging communities and tangata whenua to define what that means for local water bodies. Council must actively involve tangata whenua in decision-making around freshwater.

Hawke's Bay Regional Council is currently engaging tangata whenua and communities through the Kotahi Plan engagement process. This will combine and update the existing Regional Policy Statement, the Regional Resource Management Plan, and the Regional Coastal Environment Plan into one, while also giving effect to the new policies, planning and technical standards from Central Government. This includes freshwater management and water security.

Over the next few years, Hawke's Bay councils will also be working towards how they integrate water security planning into Central Government's Spatial Plan Bill and Natural and Built Environment Bill – two of the three proposed replacements for the Resource Management Act.



# Te Mana o te Wai

*Te Mana o te Wai puts the environment first.*

*Central Government's freshwater framework Te Mana o te Wai prioritises freshwater for the environment, then human health, then other water uses.*



1

## Environment

First, the health and well-being of water bodies and freshwater eco-systems.

2

## Human health

Second, the needs of people (such as drinking water); and

3

## All other uses

Third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and into the future.

You can find the National Policy Statement for Freshwater Management here:

<https://environment.govt.nz/acts-and-regulations/national-policy-statements/national-policy-statement-freshwater-management/>

# He aha ngā mahi e mahi kē ana Te Kaunihera ā-Rohe o Te Matau-a-Māui ki te tiaki i te whakamarutanga wai?

## What is Hawke's Bay Regional Council already doing to protect our water security?

*The Regional Council has been working to improve water security for decades. Much of the Regional Council's work to protect and enhance Hawke's Bay's environment revolves around the management of freshwater – maintaining flood protection, improving water quality, and managing water quantity.*

The Regional Council works with local councils, tangata whenua, and the community on a range of freshwater management initiatives, such as capping new water takes on fully-allocated catchments, setting minimum flows and limits for when water can no longer be taken from rivers, and providing guidance and rules on water storage projects.

However, the threat of climate change has escalated the timeframes for getting freshwater management right. In 2020, the Regional Council secured funding from Central Government, through the Provincial Growth Fund, to increase the scale and ambition of its investigations into options for securing our access to freshwater.

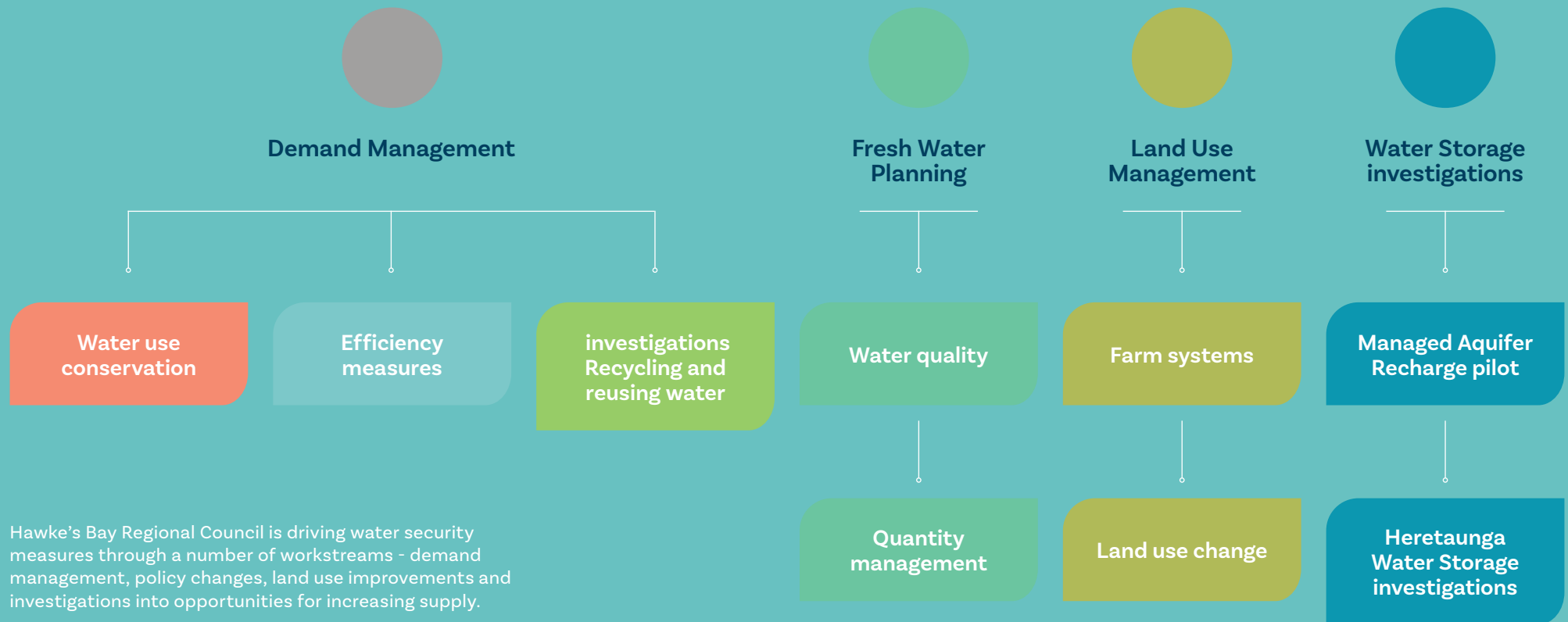
The Regional Water Security Programme was established in 2020 to deliver projects that could ensure “Hawke's Bay has enduring, climate-resilient, and secure supplies of freshwater, for all.”

These projects include the Regional Water Assessment to investigate options for reducing demand and increasing supply to inform decisions on water security, a Managed Aquifer Recharge pilot in Central Hawke's Bay, and a community-scale Water Storage feasibility study for Heretaunga.

Kānoa – Regional Economic Development and Investment Unit, which administers the Provincial Growth Fund, works closely with the Regional Council to ensure the success of this work.



# Hawke's Bay Regional Council water security response



Hawke's Bay Regional Council is driving water security measures through a number of workstreams - demand management, policy changes, land use improvements and investigations into opportunities for increasing supply.

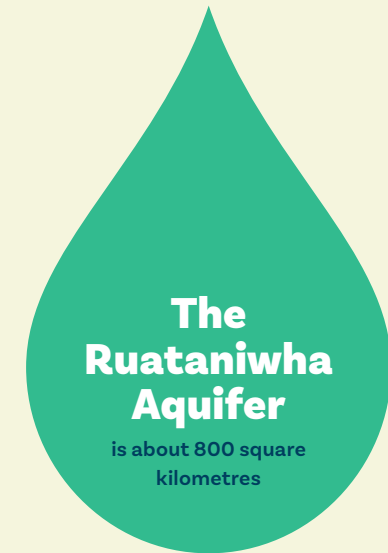
# Te pūtaiao o te wai

## The science behind our water

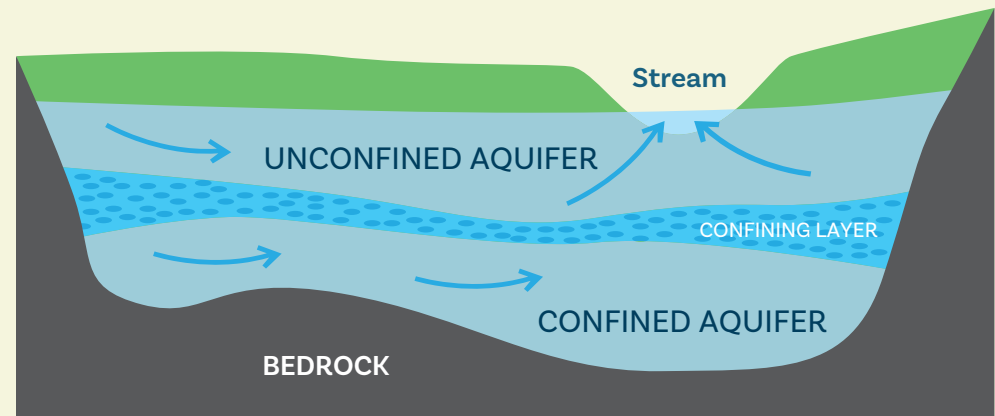
*Hawke's Bay is bordered by mountains to the west and the coast to the east, with large flat plains in between.*

Rain that falls in the mountains pours across the Ruataniwha (Central Hawke's Bay) and Heretaunga (Hastings and Napier) plains through our main rivers of Tukituki, Ngaruroro, and Tūtaekurī. In the north, Lake Waikeremoana feeds the Wairoa River.

Under the rivers of the Ruataniwha and Heretaunga Plains are the gravels and stone layers that act as a sponge, soaking up and filtering water from rainfall and the rivers. These layers are called aquifers and they run in the same direction as our rivers, but much slower and deeper. The aquifers support the water levels of the streams and rivers, which in turn support the environment and biodiversity that make our region unique.



### Confined and unconfined aquifers



#### Unconfined aquifers

are connected to springs, streams and rivers, so taking water from them can reduce flows in surrounding waterways.

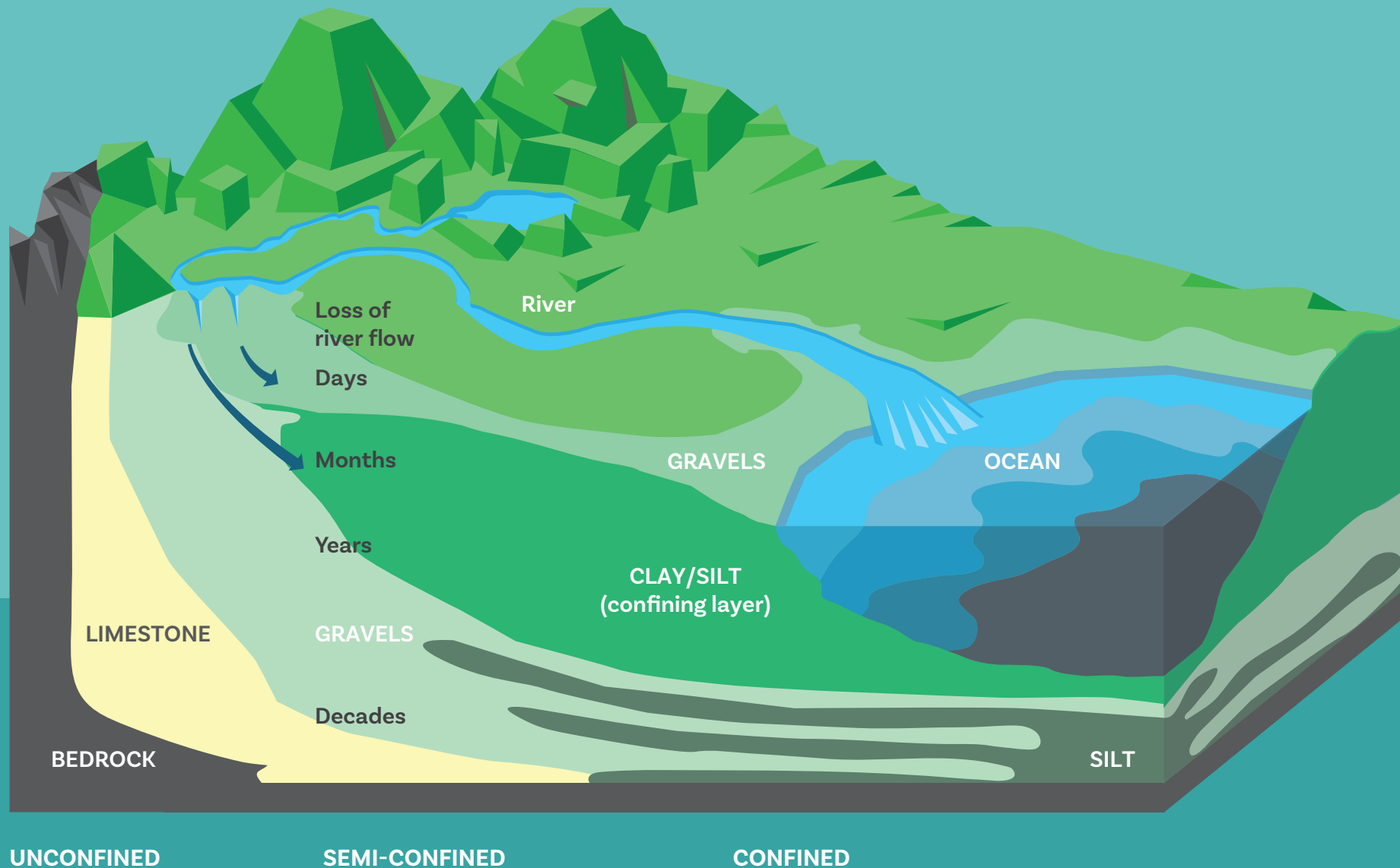
#### Confined aquifers

are separated from streams and rivers by layers of silt or clay.



# The Heretaunga Aquifer

How do Hawke's Bay's water systems work?



# Ngā kitenga i te pūrongo | Te whakaratonga wai ināiane Report findings | Current water supply

*The Regional Water Assessment report focused on the July 2019 to June 2020 year and found that at the start of the year, 10.2 billion cubic metres (Bm<sup>3</sup>) of water was held across all water sources in the region.*

Over the year, 13.9Bm<sup>3</sup> of water was carried by our rivers. Of that 2.4 Bm<sup>3</sup> flowed from other regions and 11.4 Bm<sup>3</sup> was from internal flows, predominantly run-off. 16.3Bm<sup>3</sup> of rain fell on Hawke's Bay in that year.

In 2019/20, Hawke's Bay received 79% of average rainfall. Above average rainfall in October and November masked the impact of successively dry months from November through to May, but between July and June, Napier specifically had a record dry year.

**10.2Bm<sup>3</sup>**  
**(approximately) of water held  
across all sources in Hawke's  
Bay as at 1 July 2019.**

**16.3Bm<sup>3</sup>**  
**of rain fell in Hawke's Bay  
in the 2019/20 year.**

**13.9Bm<sup>3</sup>**  
**of water carried by  
our rivers.**

**79%**  
**of average annual rainfall  
in the 2019/20 year,  
providing a useful proxy  
for high demand use in a  
fully-allocated system.**





*“In a climate change-impacted future, it is likely more water will need to be retained in the environment for the health of water bodies and human health.”*

Regional Water Assessment

# Ngā kitenga i te pūrongo | Te popono wai ināianei Report findings | Current water demand

The Regional Water Assessment took a snapshot of how much water Hawke's Bay is taking from the region's rivers and aquifers during the 2019/20 year.

**64%**

of water we used in  
Hawke's Bay comes from  
groundwater supplies.

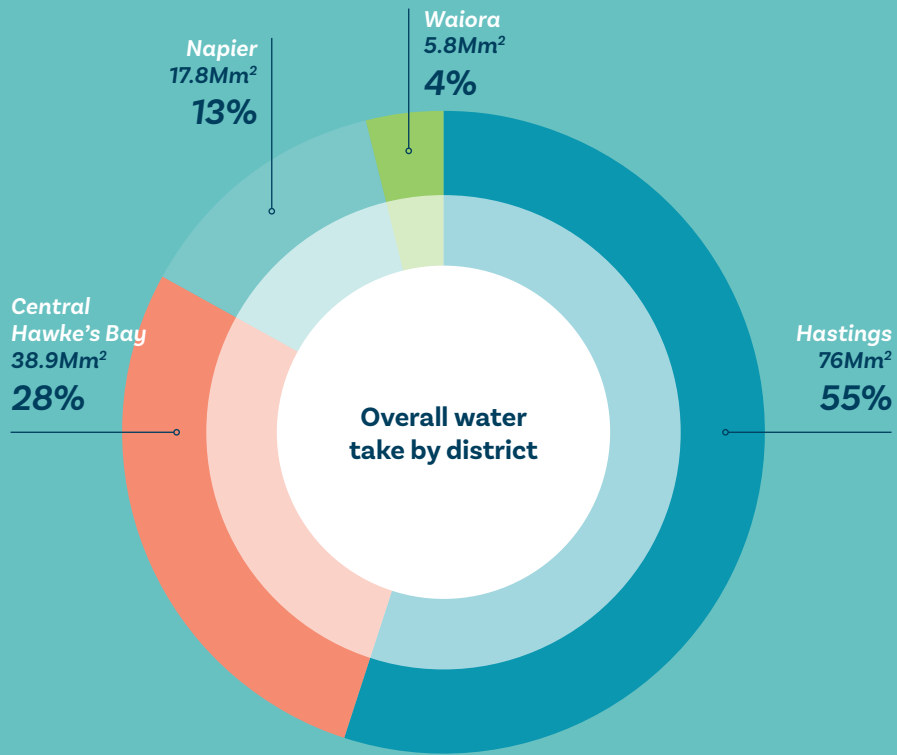
**138**  
million cubic  
meters

of water was used in  
economic activities and  
households in Hawke's Bay  
in the 2019/20 year.

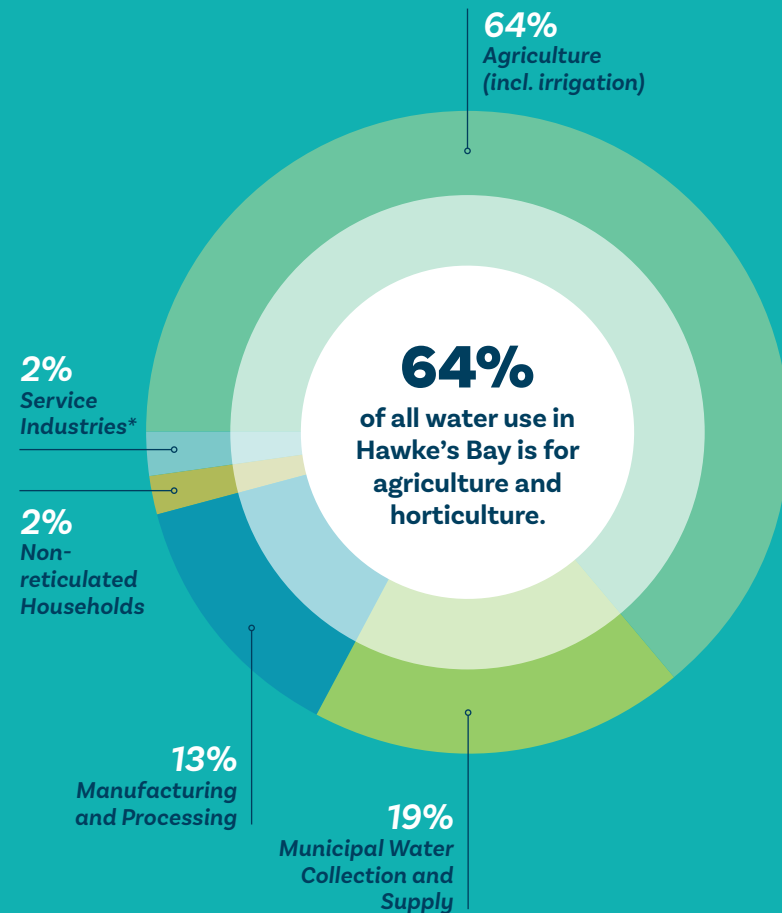
**35.3%**

of water we used was  
taken directly from rivers  
and streams.





Hastings is the highest total water user in the region with most of our horticulture, industry, and population located there, followed by Central Hawke's Bay, then Napier, with Wairoa using the least.



In 2019/20 Hawke's Bay used 138 million cubic metres (Mm<sup>3</sup>) of water, with 64% being used by agriculture and horticulture, 19% for households, and 13% for manufacturing and processing.

Most water supply was sourced from groundwater (59%), followed by surface water (40%) and the remaining coming from collected rainwater (1%).

# Te wāwāhinga ā-rohe

## Regional breakdown

In the 2019/20 year, Hawke’s Bay used 138 million cubic metres of water, but the profile for each of the four districts was quite different - reflecting annual rainfall, land use, and population density differences.



### Wairoa

**Impact of climate change**  
Increasing wet weather and severity of storms.

**Future thinking**  
Wairoa will continue to enjoy an abundance of water. How can we support further economic development in this district?



### Hastings

**Impact of climate change**  
Increasing water scarcity in drier months, higher severity of storms.

**Future thinking**  
As our economic engine room with increasing demands on limited supply, how do we continuously improve water use and look at slowing water down? Consider whether the current allocation framework delivers the outcomes the community want in this district?



### Napier

**Impact of climate change**  
Increasing water scarcity in drier months, higher severity of storms.

**Future thinking**  
As a small land area with a high population, how do we build resilient water supply for the city while looking at improving water efficiencies in this district?



### Central Hawke’s Bay

**Impact of climate change**  
Increase of water scarcity in drier months, higher severity of storms.

**Future thinking**  
How do we match appropriate land use with slowing water down to create a future with sustainable freshwater access for all? Consider whether the current allocation framework delivers the outcomes the community want in this district?

# Ngā kitenga i te pūrongo | Te whakaratonga ā te anamata Report findings | Future supply

As with the example year of 2019/20, climate change trends demonstrate that we can expect our seasons to get drier and more intense rainfall to occur.

This means our unsustainable use of water needs to change. Our waterways already have no more to give but pressure on our supplies is only set to increase – that pressure represents the opportunity cost of climate change.

The 2022/23 summer has been wettest on record, culminating with the devastating Cyclone Gabrielle.

Unfortunately, this volatility is part of the long-term impacts of climate change – we will see more severe weather events but overall, we will have less rain across the year. A 2020 NIWA report, *Climate change projections and impacts for Tairāwhiti and Hawke's Bay*, projected reductions in overall rainfall with:



**Annual rainfall forecast** to drop up to 5% by 2040, and up to 15% by 2090.



**Reduced water availability** from lower river flows, potential impacts on freshwater ecosystems, and availability for irrigation and urban supply.



**Increased storm intensity**, which may mean more slips, floods, and erosion, and damage to infrastructure (e.g., roads, water supply), the forestry sector, and agricultural land productivity.



**Heat waves** (three or more days above 25°C) will become increasingly common, increasing to 10-20 days by 2040, and 20-60 days by 2090.



**East Coast of North Island** projected to see drier conditions in winter and spring. Less rainfall over the year and droughts more likely.

# Ngā kitenga i te pūrongo

## | Te popono wai ā te anamata

### Report findings | Future water demand

*The RWA forecasts future gaps between supply and demand by modelling a range of scenarios with varying water use improvements, climate change intensity and economic impacts.*

A range of scenarios investigated in the report show that the gap between supply and demand is expected to grow.

**Under Scenario One**, if Hawke's Bay doesn't change its water use behaviour at all, our region will face a potential shortfall of 61 Mm<sup>3</sup> by 2040 and nearly 115Mm<sup>3</sup> by 2060.

**Under Scenario Two**, if we implement significant water savings and efficiencies, reducing our use of water by 1% per year, we will still need nearly 25Mm<sup>3</sup> more water by 2040, increasing to 33Mm<sup>3</sup> by 2060.

Either scenario will have consequences right across the community, from lower water levels in rivers and flow on impacts to biodiversity, to less economic productivity and increasingly inequitable access to freshwater.

**Scenario Three** modelled "very high rates" of technology improvements, with modellers ultimately cautioning that applying constant annual rates of change over long periods may not be realistic. Modellers found the most likely future scenario was somewhere between Scenario One and Two.

#### Scenario assumptions

In modelling these future scenarios, an assumption was made that the water supply would remain at the 2019/20 year levels. A range of climate change, economic growth and levels of technology improvements were modelled. No increase in area of land under irrigation was accounted for due to an acceptance that our water ways have no more to give.

The report does not investigate how much more water will need to stay in the environment as climate change reduces the amount of rainfall and increases evaporation in the region's soils. It is recommended the water accounts process be repeated at regular intervals in future to track this trend.





## Scenario parameters

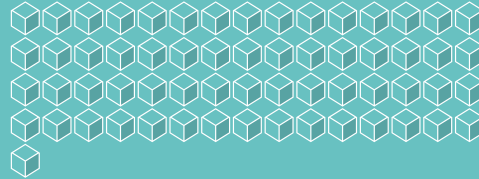
## Supply/demand gap

### Scenario One

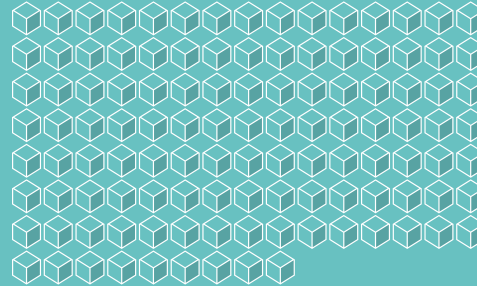
#### No improvements to water use intensity

Economic impacts  
Climate change levels

By 2040  
Nearly 61 million cubic metres



By 2060  
Nearly 115 million cubic metres



### Scenario Two

#### Less than 1% per annum improvement in water use intensity

Economic impacts  
Climate change levels

By 2040  
Nearly 25 million cubic metres



By 2060  
Nearly 33 million cubic metres



### Scenario Three

#### Between 1.2% and 2.1% per annum improvement in water use intensity

Economic impacts  
Climate change levels

By 2040  
Just over -3 million cubic metres



By 2060  
Nearly -21 million cubic metres



Modellers determined the most likely future scenario would be somewhere between Scenario One and Scenario Two

Modellers determined that “very high rates” of technology improvements may have diminishing rates of change over long periods of time e.g. 40-years. This raises the question whether Scenario Three’s 48%-84% improvements in water use are realistic.

# Te whakataurite i te popono me te whakaratonga

## Balancing demand and supply

*As a community, we need to decide how we balance the need to reduce our demands on freshwater, with the opportunities to increase supply.*

Reducing our demand on freshwater supplies is not optional.

We need to pull every lever we have to radically rethink and reduce our demand for freshwater – through new technology, behaviour change, and targeted policy.

However, identifying opportunities to increase supply might mean we can better control the pace and scale of demand reduction, lessening the impact and rate of those reductions on our community, as well as supplementing our environment when its dry.

Opportunities to increase supply would only proceed if they were viable and supported by the community.



# Ngā kitenga | Te whakaheke i te popono

## Findings | Reducing demand

*The Regional Water Assessment investigated and outlined options for reducing demand and using freshwater more sustainably, including:*

### **Improved irrigation efficiency and conservation**

As irrigation accounts for 80% of consented volumes, and with climate change putting crops under increased stress, we will need to make irrigation more efficient, investigate new technologies, and provide incentives for transitioning to new methods. The Managed Aquifer Recharge pilot includes a trial of new irrigation technologies, regenerative techniques, and a range of crops to inform future efficiencies.

### **More efficient land use**

Improved farming practices can retain more moisture in the land, such as mulching or reduced tilling, or changing to crops that require less water.

### **Industry best practices and re-use**

The Regional Council is investing \$1 million in working with Hawke's Bay's largest industrial water users to identify opportunities for greater conservation, efficiency, re-use, and collaboration.

### **Urban conservation and efficiency measures**

The Regional Council already works with local councils to encourage them and residents to fix leaks, reduce their water use, or collect water on-site for gardening. They are also working together on how town supplies can be made more efficient. One example is implementation of water meters. Even without water charges being added, water meters have been shown to reduce water use by making residents aware of how much water they are using.

### **Economic instruments**

Charging for water has been shown to significantly reduce water use. This can be achieved through general, targeted, or differential rates or charging by volume. Experience both in Aotearoa New Zealand and overseas demonstrates economic instruments significantly reduce water use.



# Te whakapiki i te whakaratonga

## Increasing supply

*Most Hawke's Bay water users are continuously improving how they use water but the Regional Water Assessment found that even significant efficiencies on their own won't be enough.*

We need to investigate all practical opportunities available to increase freshwater supply to preserve and enhance our environment, human health, and our community.

The Regional Council is investigating how we can slow water down when it's plentiful, so we have access to it during our increasingly dry summers or when demand increases. Initiatives to slow water down could be improving wetlands so water stays in the environment longer or building infrastructure to store water either above or below ground. Any viable solutions to store water would be used firstly to ensure our environment has what it needs to thrive by increasing summer flows in rivers and streams; secondly, to secure water for drinking, food preparation and sanitation supplies for our communities; and thirdly, to increase reliability for extractive users – such as horticulture, agriculture and industry.

If any supply options were possible, the priority would be to supplement the aquatic ecosystems of our rivers and lowland streams, building greater reliability and resilience to climate change.

Any viable supply options would only go ahead with the support of the community. If supply options are ruled out, then the community will understand how big the collective effort will need to be to reduce our demand.



The Regional Water Assessment investigated options for increasing supply in Hawke's Bay, including:

#### Community-scale water storage feasibility study for Heretaunga

For the Heretaunga Plains, the Regional Council is investigating the feasibility of community-scale (between 15,000 and 20,000 Mm<sup>3</sup>) water storage on tributaries of the Ngaruroro. If viable and supported by the community as an option for ensuring our region's water security, the primary purpose of this infrastructure would be to capture high flows in wetter months so they could supplement low river levels in drier months.

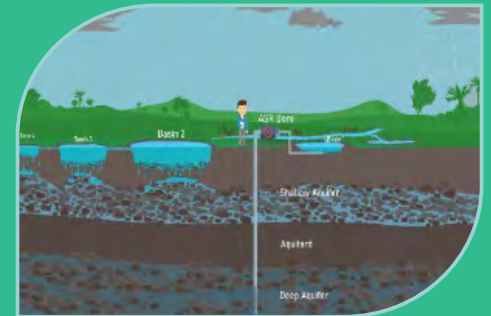
#### Managed Aquifer Recharge trial for Central Hawke's Bay

In Central Hawke's Bay, the Regional Council is hoping to run a Managed Aquifer Recharge trial that would see water piped from the Waipawa River during winter to a series of ponds. The water then filters through gravels to the shallow aquifer below to build resilience of surrounding water ways for summer. Filtered water is also piped into the deeper aquifer for retrieval for use in summer.

Other regional solutions include:

- Encouraging further economic growth in areas with ample water supply, such as Wairoa.
- Promoting holding more water in the environment through protecting and enhancing wetlands.
- Water capture and re-use through promoting rainwater tanks or re-using grey water.

Storing water underground



Storing water above ground



Hold more water in the environment

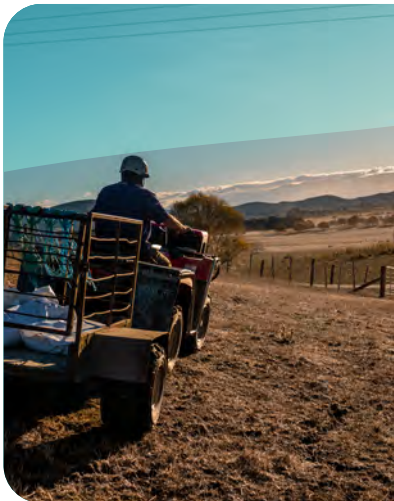


Reusing water



# He aha ngā āwhina ka taea e tātau katoa?

## What can we all do to help?



### Farmers and growers

- Improve irrigation efficiency and conservation, such as tailoring systems for specific soils, climate, and crops
- Follow industry design standards and codes that minimise water waste
- Investigate water use needs further so allocation can be more targeted
- Continuously invest in innovations and technology



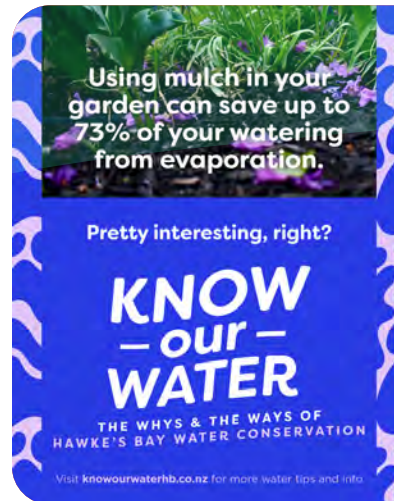
### Industry

- Industry best practices
- Continuously invest in innovations and technology
- Re-use and recycling of water



### Councils

- Allocation frameworks and consent conditions
- Planning instruments: including the freshwater plan, the Spatial Planning Bill, and Natural and Built Environment Bill
- Urban conservation and efficiency measures, e.g. urban water meters
- Education and awareness campaigns
- Economic instruments, e.g. charging for water



### Community

- Do your part to conserve and efficiently use water on your property. Get more tips from the 'Know your water' campaign supported by all Hawke's Bay councils
- Participate in the Regional Council's engagement on freshwater planning, so we can raise awareness of climate change challenges and have a community conversation about how we address them
- Support and stay informed on the investigation of community-scale supply options

# Te mahi tahi ki te hāpori

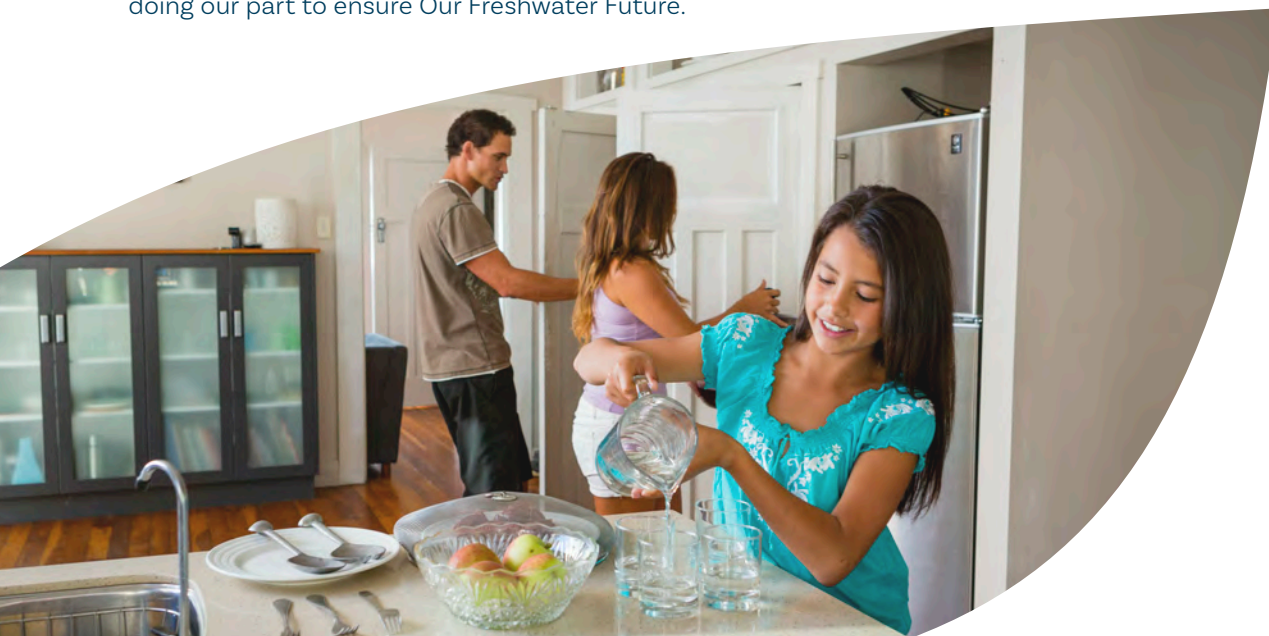
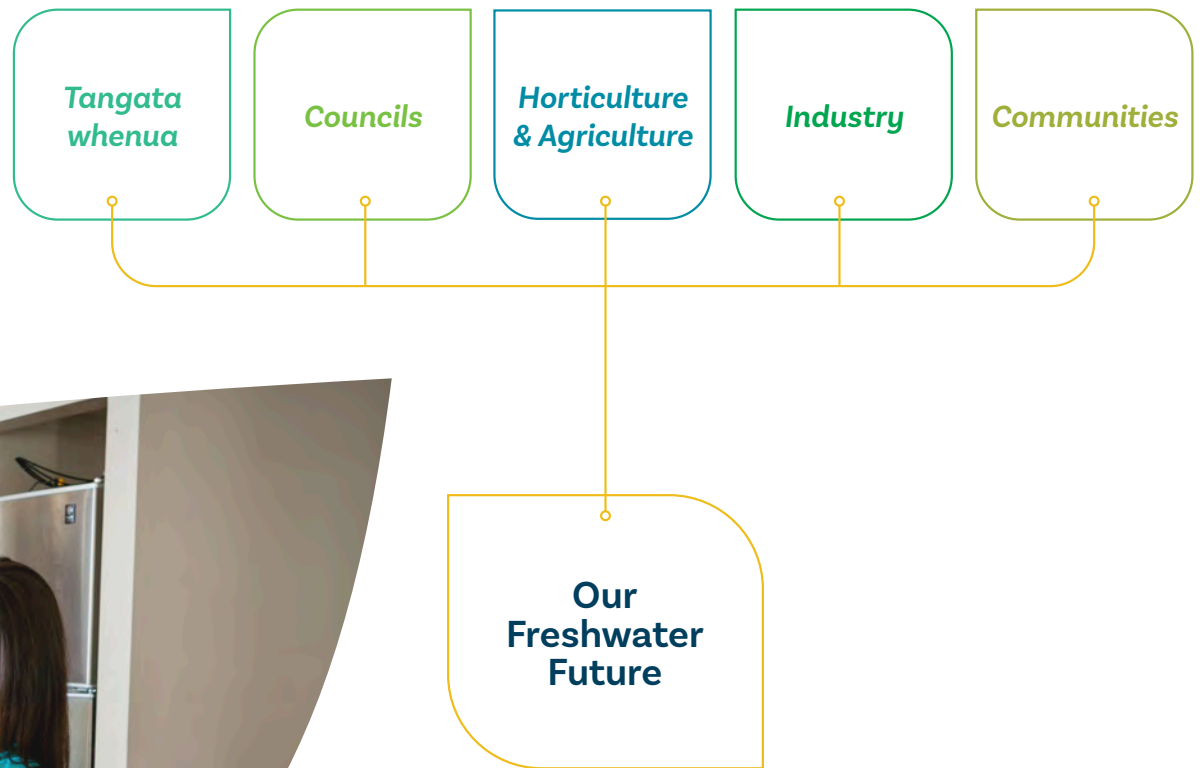
## Working with our community

*Hawke's Bay Regional Council is working with tangata whenua and key stakeholders of the water security issue, including local councils, horticulture and agriculture organisations, industrial water users, and interest groups.*

The Regional Water Security Programme team is engaging with impacted communities both directly and through the Kotahi Plan engagement process.

The team is committed to working with tangata whenua to ensure the mauri of our rivers and aquifers is protected and enhanced, especially hapū directly impacted by water security issues and closely linked to water security initiatives.

It's vital all of us are part of the conversation and doing our part to ensure Our Freshwater Future.



# Te kōwhiri i tō tātau Anamata Waimāori

## Choosing Our Freshwater Future

What we will need to ensure “Hawke’s Bay has long-term, climate-resilient, and secure supplies of freshwater, for all” is:

### Options for securing Our Freshwater Future

Our community needs to develop options for both reducing demand and increasing supply to address water security challenges. For Hawke’s Bay’s future, we all need to reduce our demand on water supply through innovation and changing behaviour. The Regional Water Assessment gives options for demand reductions to lessen that growing gap between what we have and what we want to use, and investigates opportunities to increase supply that could be a valuable tool to support environmental outcomes. *What options do we chose?*

### A constructive community conversation

For equitable access to freshwater, this conversation needs a whole-of-community focus – rather than specific users advocating for their own access. It is hoped councils, tangata whenua, rural and urban communities, the primary sector, and industry will consider the needs of our community as a whole and the needs of future generations. The Regional Council’s Kotahi Plan engagement process is an important platform for this conversation, as will be other planning processes at local councils over the next few years. *How can we act as a region to secure equitable access to water?*

### Community-supported decisions

Doing nothing is not an option and tinkering around the edges will not be enough – we will need transformative change. Cyclone Gabrielle has shown that climate change is here and we cannot delay on making decisions around water – we need to prepare now. Hawke’s Bay’s community leaders will need to make decisions that embed transformational water use change through council policy, including regional and district plans, industry best-practice and community behaviour change. *What policy, projects, or frameworks do we need to support our freshwater future?*









*"The task is not choosing one option over another but finding a new direction altogether for how we manage freshwater in Hawke's Bay."*

Regional Water Assessment



*“We have an opportunity to look to the horizon, and to plan and prepare so that Hawke’s Bay has long-term, climate-resilient, and secure supplies of freshwater, for all.”*

Regional Water Assessment



## Ngā āwhina ka taea e koe How you can help

*You can help secure our freshwater future in Hawke's Bay by:*

- Reducing your demand on our water supplies through water conservation, efficiency, and re-use. Remember every drop we don't use stays in the environment.
- Reading more in the Hawke's Bay Regional Water Assessment
- Learning more about Hawke's Bay Regional Council's Regional Water Security Programme

Learn more here:

**[hbrc.govt.nz](https://www.hbrc.govt.nz) search: [#watersecurity](#)**



**HAWKES BAY**  
**REGIONAL COUNCIL**  
TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI