



Investing in our water resources

Water is one of New Zealand's key strategic resources, but we are not making the most of it.

Over the next century, water should be a major competitive advantage for our country. Per capita, New Zealand has over 72,000 cubic metres of renewable freshwater resources, compared to a world average of less than 6,000.

New Zealand is uniquely placed to take advantage of our abundant water resources due to our strong primary sector, unique climate and low population density.

Unfortunately, we are limiting our potential through inadequate investment in water infrastructure; specifically our ability to capture, store and distribute water to where it's needed. Less than two per cent of the water that flows over New Zealand is captured. About half of this is used in our towns and cities and the other half for irrigation – but only around three per cent of our total land area is irrigated.

Despite being known for our wet weather, many of our towns and cities have faced water supply issues in recent years. Auckland has had to endure restrictions on water for much of this year, while small towns like Kaikohe have come close to running out of drinking water. The severe drought in Northland, Waikato and Hawke's Bay have led to significant stock-feed shortages, production losses and risks to animal welfare. Under climate change predictions, these situations are likely to increase in frequency and severity for many of New Zealand's towns, cities, and regions.

Improved water infrastructure and storage would strengthen security of supply in our towns and cities, while enabling our primary sector to make better use of our productive capacity and continue the move towards higher value, lower emission products with greater per hectare returns. This means more investment, more jobs, and more export

earnings to help us grow our way out of the economic crisis.

Water storage can also deliver enhanced environmental outcomes through increased river flows and aquatic habitat in drier periods, more efficient and effective application of nutrients, and by enabling higher value, lower carbon footprint land use.

We need to invest to make better use of our abundant water resources, develop resilience for our rural and urban communities, improve environmental outcomes, and take advantage of the huge growth opportunities that more strategic use of our water will enable.

National will:

- Instruct the National Infrastructure Bank to develop a long term plan for water infrastructure and storage, and provide it with \$600 million for investments over three years.
- Develop a National Policy Statement on Water Storage to provide certainty around the strategic use of water, streamline consenting for these projects, and set minimum environmental standards to manage the effects of new irrigation development from new storage projects.
- Maintain common ownership of water for all New Zealanders.
- Treat water as a strategic resource, recognising the importance of water storage for resilience, urban water supply, enhanced environmental outcomes, and better land use options in rural communities.



National's plan for water

If we truly believe in the strategic role of water as an enabler for growth, then we need real, long-term planning and investment. Our plan for water does just that.

Water infrastructure plan

National has already outlined plans to establish a National Infrastructure Bank. The Bank will be tasked with developing a coherent, long-term plan for investment in our water infrastructure and water storage capacity. The long-term plan will provide certainty that we are making the most of our water resources, deliver cohesion between projects, and ensure an appropriate balance of investment between the regions.

National will:

- Instruct the National Infrastructure Bank to develop a long term plan for investment in water infrastructure and storage.

Investment

There is a clear role for central government in coordinating investment in water storage, and the returns from such investments are significant. The Central Plains Water scheme, for example, was granted a \$65 million central government loan and has since delivered \$592 million per annum in increased economic production and created 700 new jobs.

We will provide the National Infrastructure Bank with \$600 million over three years, funded from unallocated capital allowances, to invest in water infrastructure including water storage and drinking water projects.¹

Funding will be delivered through either loans, equity investment or both, depending on the specifics of each project. As loans are repaid or equity is sold to land owners, this money can then be recycled into future investments.

Many of these projects will be outside the major centres of Auckland, Wellington and Christchurch.² This will ensure our regions are

able to share in the economic development opportunities that better water infrastructure will deliver.

National will:

- Invest in drinking water infrastructure and water storage to improve urban resilience, grow rural communities and improve environmental outcomes.
- Provide \$600 million through the National Infrastructure Bank for water infrastructure, including urban and regional projects.

Regulation

Applications for new water storage infrastructure are being stifled by a costly and protracted planning and consenting process. This imposes real costs on local communities as valuable development opportunities are lost. It is vital that we reform planning laws like the Resource Management Act (RMA), with a focus on enabling timely and cost-effective investment in key infrastructure projects like water storage.

We will repeal the RMA in our first term and replace it with an Environmental Standards Act and a Planning and Development Act. In the interim, we will amend the existing legislation and set a National Direction on Water Storage to streamline consenting.

National will:

Set a National Direction on Water Storage to streamline consenting processes.

- Amend the RMA to enable investment in water storage in the short term, and ensure that the legislation replacing the RMA facilitates investment in water infrastructure over the long term.
- Reduce red-tape restrictions that limit the ability to store water in urban areas, to increase resilience during low-rainfall years.

¹ This funding is not intended for wastewater or stormwater infrastructure. The National Infrastructure Bank is expected to partner with local government to fund wastewater and stormwater.

² Auckland may need to fund water sourcing rather than water storage. This is able to be included in this water storage fund.



Allocation

National believes that water belongs to everyone, but is owned by no one.

The allocation of water resources is complex, involving significant economic and social benefits (and costs) for a range of relevant parties.

We will work with local councils, iwi, community and industry groups to find solutions that enable better use of our water resources while retaining flexibility to encourage new projects to progress.

National will:

- Maintain common ownership of water for all New Zealanders.
- Work with iwi, regional councils, and community and industry groups on water infrastructure projects to support common objectives.

Environmental standards

Our dairy, sheep and beef farmers are the most carbon-efficient producers of red meat and milk in the world. We believe the world will always want red meat and milk, and New Zealand will always produce it.

At the same time, there is a huge opportunity to produce more high value horticulture. Crops like avocados, apples, cherries, kiwifruit and grapes for wine-making can return four to ten times the economic productivity per hectare of pastoral farming, where the conditions are right and there is access to water. We believe investment in water storage can unlock huge economic potential in our regions.

We need to balance these significant economic opportunities with sensible regulations that ensure we protect and enhance our environment – and our water resources – so that future generations of New Zealanders can continue to enjoy and benefit from them.

Through a new National Policy Statement on Water Storage, National will set overarching planning and consenting processes, including

minimum standards that all irrigation accessing water via new water storage projects must adhere to. This would be more flexible than Labour's Essential Freshwater policies, recognising waterways across New Zealand have varying attributes, land-use capability, and sensitivity to nutrients.

National will:

- Develop a National Policy Statement on Water Storage that will set overarching planning and consenting processes, including minimum standards that all irrigation accessing water via new water storage projects must meet.
- Encourage innovative pricing structures that encourage the adoption of smart water technologies that reduce unnecessary use.

The benefits of better water infrastructure

Better water infrastructure and water storage will provide a range of benefits to New Zealand, enabling growth in our towns and cities, supporting opportunities for our small towns, creating economic value for our rural communities, enhancing our environment, and improving our resilience to the effects of climate change.

Creating urban resilience

Our urban communities are highly dependent on adequate water storage for growth. As our population increases, urban authorities will come under sustained pressure to provide clean drinking water while accommodating recreational and industrial water use requirements.

Many urban areas are already struggling, with Auckland this year enduring restrictions on water use such as the closure of public swimming pools and a ban on hoses and car washes – even during winter. In a country with an abundance of water, it seems inconceivable that our largest city should have water shortages to the level we've experienced this year. It is simply not



acceptable for this to continue. Auckland needs water to flourish and grow.

National understands the needs for urban drinking water in our major centres will stretch beyond the \$600 million we have allocated, and it is our intention at least half of this investment is directed towards rural areas. The model we have adopted, however, will mean that the National Infrastructure Bank focuses investment on pre-feasibility and establishment of projects, and then seeks third-party finance to supplement its own investment. In this way our \$600 million investment is more than enough to cover urban and rural needs.

Secure water supply is not just a residential issue. The industrial sectors of our economy rely heavily on access to clean, secure water supply. An example is the industrial zone in Timaru that is struggling with water supply and would benefit from a reinvigorated water storage proposal.

Supporting regional economies

Water storage can support our communities that are most in need by delivering secure water supplies, enabling the development of regional industries, and unlocking economic opportunity.

For example, the majority of the land supported by the Kerikeri water storage scheme is horticultural, while the scheme also provides the bulk of Kerikeri's town water supply.

It is estimated that the Kerikeri water storage scheme alone provides 2.5 per cent of the GDP of the Far North. It is not a coincidence that Kerikeri South has the lowest levels of deprivation in the Far North and the best access to water.

Water storage and irrigation can also help unlock the potential of Māori land, through increased production or more high-value land-use options. This would allow Māori land to be used more productively, contributing to Māori economic and social development.

Delivering economic growth

As a small open economy at the bottom of the world, New Zealand relies on our export sectors to drive our economy.

Horticulture is now our fastest growing agricultural sector, with exports growing at 50 per cent over the last four years. High value horticultural crops like avocados, apples, cherries, kiwifruit, and grapes for wine-making can return four to ten times the economic productivity per hectare of pastoral farming, where the conditions are right and there is access to water. Horticulture NZ recently released its growth strategy and one of the key features was the need to invest in water storage to enable this growth.

With just three per cent of our total land area irrigated, irrigated land produces 90 per cent of our vegetables, 58 per cent of wine and fruit, 52 per cent of grain and crops, 26 per cent of our dairy and two per cent of our sheep and beef production.

Rural communities are increasingly under pressure to improve environmental outcomes. The use of water storage is crucial in enabling the movement to higher value products and export returns. It means more jobs and new prospects for marketing and value-add processing. The use of water to grow our rural communities is an opportunity we cannot let slip away.

Enabling better environmental outcomes

Water storage can improve environmental outcomes by improving summer river flows and reducing the impacts of drought on freshwater eco-systems (water is captured during times of high rainfall and released during dry periods).

In many regions around New Zealand, water storage will enable higher value and lower emission land use choices.

Water storage can also ensure strong environmental processes are followed by those using the water. As a condition of accessing the water, farmers and growers can be required to undertake comprehensive



farm environment planning, tailored to the environmental risks of that farm and the surrounding area or catchment.

For the farmers and growers, the overall benefit of access to water far outweighs the additional cost of meeting the higher environmental standards that are a requirement of receiving the water. This can make water storage a win-win, allowing farmers and growers to capture productivity gains, while improving environmental outcomes, and would be required under our proposed National Policy Statement for Water Storage.

Water storage case studies

Northland

Northland has a unique sub-tropical climate and high quality volcanic soils, but suffers from frequent summer dry periods. Northland's climate is suitable for a variety of high value horticultural crops and currently produces citrus, avocados, and kiwifruit for export. Northland also puts potato, kumara and leafy greens on Kiwi tables all over New Zealand.

Northland has two established water storage schemes – one at Kerikeri and one west of Whangārei at Maungatapere. Both schemes support predominantly horticultural land use.

These water storage schemes were planned by the Ministry of Works in the 1970s and constructed in the 1980s, prior to arrival of the RMA.

In today's money, the total capital cost of the Kerikeri water storage scheme was \$42 million. The scheme is estimated to contribute \$100 million to the Far North economy, supporting 920 jobs – a phenomenal payback on investment.

The Northland Strategic Irrigation Infrastructure Study indicated 186,282 hectares of potentially irrigable land. Of this, only four per cent is presently irrigated.

We don't expect to irrigate all potentially irrigable land, but we can do much better.

In 2017, 17 land owners in the Far North applied for consent for water. The application planned to develop avocado orchards north of Kaitaia. The application was supported by local hapū, and granted by the Northland Regional Council. Scientific evidence showed negligible impact on the local aquifer.

The Department of Conservation appealed the consent on the 'precautionary principle' stating that doubts still remained. This delayed the consent, but it was eventually still granted. Following this, a second appeal was lodged on Treaty of Waitangi grounds. This appeal was granted by the Environment Court but it was thrown out by the High Court.

It is bizarre that Northlanders would find themselves funding both sides of a court case, one through rates to Northland Regional Council, secondly through taxes to the Department of Conservation. More problematic is Central Wellington running roughshod over regional interests.

This consent is now going ahead. A second application is now underway for further avocado orchards in a nearby area. This application may also face a costly and time consuming RMA process.

National believes Northland has fantastic agricultural resources but it is currently being stymied.

Not every investment will need government financial support – the first thing needed is to remove the cumbersome RMA and address the lack of direction from central government.

There are many other regions around that country that will have similar opportunities.

Auckland

Auckland has three main water sources; storage dams in the Hūnua and Waitākere Ranges, the Waikato River, and an aquifer in Onehunga.



Watercare operates 12 water supply lakes (dams), five of them located northwest of Auckland in the Waitākere Ranges, two near Helensville, four to the southeast in the Hūnua Ranges, and one east of Papakura. These dams typically supply about 80 per cent of Auckland's water.

The Hūnua dams were built between 1951 and 1977, while those in the Waitākere Ranges were built between 1907 and 1971.

Since 2002, the Waikato River has been part of Auckland's water supply network, providing an average of 136,000 cubic metres of water to the region each day.

Water service reservoirs also play a crucial part in the supply and distribution network, with more than 80 located across the city, including eight on Auckland maunga.

Between November 2019 and May 2020, Auckland received 40 per cent less rainfall than normal, making it the region's worst drought on record. On April 15th, the total volume of water stored in the dams dropped below 50 per cent for the first time in more than 25 years. This resulted in Auckland Council announcing water use restrictions including the closure of public swimming pools, a hose and water blasting ban for residential users, and restrictions on commercial use including for sports field irrigation and car washes.

Auckland has become heavily reliant on its pipeline from the Waikato River, which has been supplying around 40 per cent of the region's daily needs in recent months. Watercare expect restrictions banning most outdoor use of mains water to remain until mid-2021.

The council-owned company has signalled that it needs \$224 million to accelerate supply boosts over the next year.

For a city with ambitions to be world-class, Auckland needs a better plan for water supply.