



Wairarapa means glistening waters, and our region is a place of natural abundance. But our natural supply of water is increasingly unpredictable and not available when it is needed most. This causes uncertainty and limits the opportunities in our local community and region as a whole.

Water Wairarapa's purpose is to secure a sustainable future for our region's people, land and water, by storing and using water in ways that boost regional prosperity, care for the environment and support community use.

Our vision is a vibrant and flourishing Wairarapa through the reliable supply and management of water. A brilliant place to live and work, full of opportunities, for generations to come.

CONTACT US:

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Climate change projections and impacts

KEY MESSAGES

NIWA (Water and Atmospheric Research) has projected that Wairarapa is expected to experience some significant changes over the next 20 to 70 years. The figures below give a likely scenario if global CO₂ emissions are not strongly reduced in the next few years.

WARMING AND HEAT WAVES

The number of 'hot days' - classified as above 25°C - could nearly quadruple by 2090.

 2040: 1°C warming (+30 hot days/year)
2090: 3°C warming (+80 hot days/year)

Wairarapa *growing conditions* in the future may look like Hawke's Bay by 2040 and Northland by 2090, provided reliable water is available.

DRIER

Annual rainfall on Wairarapa's valley floor is expected to fall, 10-15% by 2090, with a significant risk of increased drought.

 2040: 5% drier (normal year will look like a drought year of today)
2090: 10% drier (normal year will be worse than the worst drought we have now).

An increase in drought would have significant ramifications for primary industries and flow on effects for water supply. NB: A big driver of drought will be warmer temperatures.

OPPORTUNITIES

- While more droughts may limit pasture production and crop growth, warmer temperatures may allow for different crops to be grown with the possibility of multiple rotations. Countering against this is the likely stress on water reliability, expected to come under increasing pressure.
- As well as new agriculture, there will be tourism and business opportunities, but these will require reliable water.
- If we get prepared now we'll be much better off.

Securing a sustainable future

Water Wairarapa's purpose is to secure a sustainable future for our region's people, land and water, by storing and using water in ways that boost regional prosperity, care for the environment and support community use.

WATER

- The use and responsible management of water is fundamental to the future wellbeing of the Wairarapa. Freshwater is in natural abundance here, however supply is becoming increasingly unreliable with the certain impact of climate change exacerbating this problem, the effects of which will have social, economic and environmental consequences.
- Water Wairarapa believes the problem can be solved by harvesting water during times of high rainfall and storing it for use when it is needed most.
- A more reliable source of water has the potential to deliver significant long-term economic and social gains that provide resilience to the region.
- Water storage and a catchment-wide approach to water use and management also provides opportunities to augment summer stream flows, enhance water quality, supplement urban water supplies and create new recreational uses.

OPPORTUNITIES

- An affordable, reliable and economically viable water supply would provide Wairarapa with a new and more diverse range of options for land use. These include arable farming, high-value crops, sheep dairy, seeds, horticulture, livestock finishing and viticulture. With a reliable source of water, traditional livestock farming, including dairying, can be replaced by more plant based food production.
- Evidence from other water storage schemes shows that there are significant economic benefits to be gained from irrigation. It is widely accepted that, for every \$1 an irrigating farmer makes, at least another \$3 is indirectly generated in the local community. Opportunities for secondary processors to shift into the region are created.
- Increased land-based production resulting from other New Zealand irrigation schemes has been shown to contribute to increasing school rolls, improved ability to fund community amenities and job opportunities.



PROPOSAL

- The scheme being investigated involves building a dam and distribution system at one or more sites. The two proposed reservoir locations are situated at Black Creek in the Kaituna area west of Masterton and Tividale, north-east of Masterton. Water would be available for farmers and growers in the catchment area via pipes to the farm gate.
- Currently, about 12,000 hectares of the Wairarapa valley are irrigated. An additional 30,000 hectares could be irrigated from the scheme. This would require storing approximately 2-4% of the volume of water flowing out to sea per year.
- The scheme could be built in three stages, each costing approximately \$90million. Each stage designed to meet the demand of food producers, industry and also urban requirements.
- Any such scheme will be bound by the Government's National Policy Statement for Freshwater Management which requires regional councils to 'maintain or improve' water quality by setting policies and rules.



WHAT IT IS NOT

- The proposed scheme is not a large-scale dairy farming project. No new dairy conversion is forecast. Existing land uses, including dairy farmers will be among the first adopters as they look to expand their irrigated area.

CHALLENGES

- A project of this scale represents a significant cost. A range of ownership options are available for the scheme and no decisions will be made until the extent of public and private benefits are clear. The scheme can be designed to meet the demand of farmers and also urban requirements.
- The Regional Natural Resources Plan and Ruamahanga Whaitua process will ensure that the scheme meets environmental standards, and efficient use requirements is in accord with allocation limits.
- Based on similar New Zealand experiences, it takes, on average, at least 10 years for these types of schemes to be established. The lengthy process risks impacting on the community's appetite for the scheme. However, the Wairarapa scheme is over halfway through the process, and subject to viability, attracting the necessary investment and resource consents, construction could start in the early 2020's.

Significant development projects such as Water Wairarapa can only be achieved with strong community support. We would urge you to be vocal in your support of continued investment in the project as it will unlock economic activity that will benefit each and every business in the region.