





March 2016

# **Project overview**

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.

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





DIARY DATES

April 2016 - Field Days. Irrigated land uses – what works in Wairarapa?

All 2.00pm-5.00pm followed by a BBQ.

**12 April** Barry Kempton's property,

Elm Grove, 48 Kemptons Line, Greytown

14 April Nathan & Kate Williams' property,

Otahuao, 463 Masterton, Castlepoint Road

**20 April** Rob Dick's Property, Easterbo,

575 East Taratahi Road, Carterton

May 2016 Independent Farmer Survey

About 5-6 metres of water falls in the Tararua Ranges each year. However, comparatively little falls on the good soils of the Wairarapa valley floor, much of which is suitable for high-value production.

There is often surplus water for towns and farms in winter and not enough in summer. Dry summers also mean that stream and river flows can be very low. Water allowed to be taken across much of the Ruamāhanga catchment is fully allocated. These problems can be solved by harvesting water during the wet periods, then storing it for use when it is needed most.

#### How could the stored water be used?

Once water is stored it could be used for:

- irrigating up to 30,000ha of the Wairarapa valley
- increasing reliability of existing irrigation (12,000ha) and frost fighting
- supplementing low summer river and stream flows
- supplementing town water supply
- recreation
- stock drinking water
- electricity generation



# A socio-economic opportunity What is proposed?

An affordable, reliable and economically efficient water supply would provide Wairarapa with a new and more diverse range of options for land use.

These include arable farming, high-value crops, dairy, sheep dairy, seeds, horticulture (e.g. apples), livestock finishing and viticulture.

An independent study has estimated that the gains in productivity and profitability provided by irrigating 30,000 more hectares in Wairarapa would result in:

- \$150 million added each year in the greater Wellington region, mostly in Wairarapa
- 1,200 new jobs
- \$90 million added as a result of farmer investment in irrigation
- 1,100 jobs for one year as a result of farmer investment in irrigation
- Stronger rural communities schools, clubs, facilities
- Expansion of support and service sector e.g. harvesting, transport, machinery, retail.

For every \$1 an irrigator makes, at least another \$3 is created in the local community.

Two water storage and distribution schemes, Black Creek and Tividale, were proposed in mid-2015 following four years of thorough investigation of a range of options. Between them the schemes could provide water for additional 30,000ha of irrigation and a range of community and environmental uses.

Infrastructure for both schemes would consist of a dam, a storage reservoir, associated headrace infrastructure and a distribution network to deliver water to customers.

# **Environmental challenges...**

More intensive agricultural and horticulture production made possible by irrigation presents challenges for managing nutrients that affect water quality.

The ability to intensify farming operations will depend on operating within regional policies and rules for water quality. Good management practices for irrigation, effluent, nutrients, soil, stock, feed and planting near waterways can make irrigated farming both economically and environmentally sustainable.

In a separate project the Wairarapa community, through the Ruamāhanga Whaitua committee, is creating a vision and prioritising aims for land and water management in the catchment. This will include limits on what can be taken from or discharged into waterways, based on community values. Ultimately the Whaitua's work will become part of the region's new Natural Resources Plan that will control how resources are managed.

### ...and opportunities

The Wairarapa Water Use Project is actively exploring ways in which the proposed schemes could help improve the overall management resilience, efficiency and reliability of the water resource in the Ruamāhanga catchment.

For example, could water storage help stop streams almost drying up in summer? Could it help solve toxic algae problems? Could it support the long-term supply of municipal water?



#### Who's involved?

Project Investigations are led by the Greater Wellington Regional Council and jointly funded by the Council and the Ministry for Primary Industry's Irrigation Acceleration Fund.

Conversations with all parts of the community are vital to hear perspectives about water uses and values in Wairarapa, and to develop an economically viable and environmentally sustainable scheme.

The project's Governance, Leadership and Stakeholder Advisory Groups, involve local government, farming, iwi, environmental, business, health and recreational interests. These groups enable community views, expectations and project information to be developed and shared.

The project is talking with Wairarapa farmers and growers about their interest in buying access to irrigation water and in investing in the schemes.



# What's happening in 2016?

The project, currently in its feasibility phase, continues to quantify and assess a range of risks and potential benefits as it moves towards the next phase of finance, consenting and final design. Construction could begin in 2020.

Following on from earlier work, a more detailed study of the financial, environmental, social and cultural feasibility of the proposed Black Creek and Tividale schemes is well underway.

The 2015-2017 feasibility phase aims to move the project into a new commercial entity that can complete investigations and if viable, raise capital for construction. The shape of that entity is yet to be determined.

Areas of focus for the feasibility study include:

- irrigated land use options
- farmers would want it
- Scheme commercial structure and funding options
- Scientific modelling, study of environmental impacts Identifying cultural opportunities and risks and opportunities
- Economic and environmental viability of various Regional Plan implications, environmental limits, water allocation and efficiency
- Assessing likely demand for irrigation water and when Exploratory geotechnical drilling at proposed dam sites
  - Understanding more about regional benefits and social impacts

  - · On-going community engagement

# **Project Phases**

**Current Phase** 

**Project** scoping 2010/11

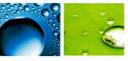
**Options** ID & refine 2012/13

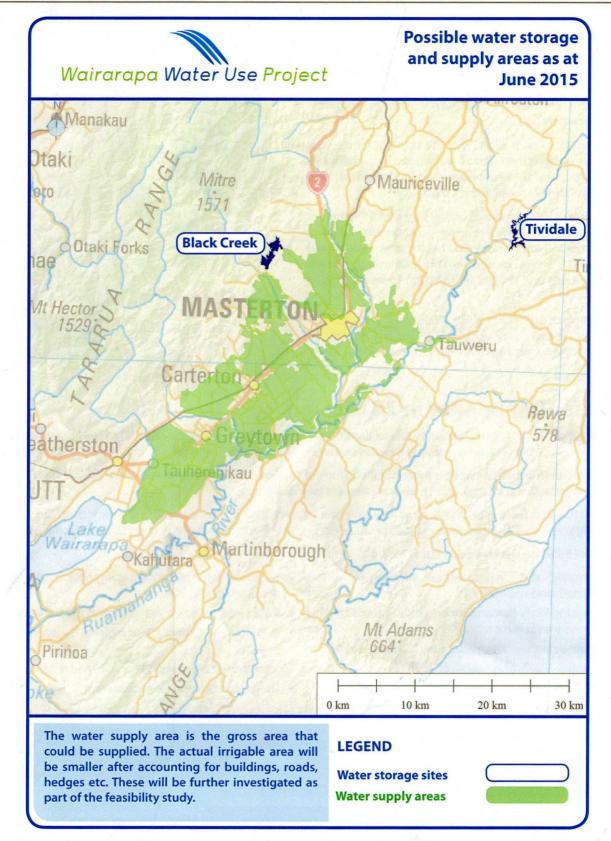
Prefeasibility 2014/15

**Feasibility** 2015/17

Consenting, design, finance 2017/20

Construction 2020+





# For more information contact:

Michael Bassett-Foss | WWUP Project Director | Phone: 06 826 1608 Email: Michael.Bassett-Foss@gw.govt.nz

**Greg Ordish** | WWUP Technical Co-ordinator | Phone: 06 826 1513 Email: greg.ordish@gw.govt.nz

www.wairarapawater.org.nz

To find out more about the Ruamāhanga Whaitua committee and how you can be involved visit

www.gw.govt.nz/ruamahangawhaitua/