de to call time on the Waimea Dam

PETER FRASER

ex ante 'off ramps', or decision points where, in light of specific storage scheme contain a host of place. Given uncertainty, it is proposals like the Waimea water necessary for projects have clear information, a decision is made to stop if a feasibility line has OPINION: At the outset, indeed, this is why a feasibility study is required in the first unknowns and uncertainties been crossed.

and Councillor King have pub-licly stated 'off ramps' for the Lee Indeed, Mayor Kemptherne Valley dam at \$90 million and \$100 million respectively.

This is commendable.

ant public control measure for councils – as there is a huge difference between spending your money. The failed Ruataniwha Water Storage Scheme is a stark Off ramps are also an import own, versus someone else's. warning of what happens councillors ignore them.

Council was told by its own advisors the Ruataniwha scheme In 2014 Hawkes Bay Regional was not economically feasible.

The advice was ignored and as a consequence, the off ramp

Three years and a further \$15 million later the project was finally abandoned. Total expenditure of around \$25 million has since been written off and the remaining 'intellectual property' sold for a paltry \$100,000.

The Tasman District Council



\$100 million (and rising) it is 'stu-\$82.5 million it is not - and at pidity on a stick'. now faces a similar decision Over the past decade the Lee Valley Dam has escalated from

And increasing hysterical warnings of what will occur if the dam is not built will not change that. being a \$26 million project to one in excess of \$100 million. While projects invariably increase in cost there is always a financial

dam District Council need to face advocates or opponents the 14 men and women on the Tasman reality that the project is neither Whether they be

> the case of Lee Valley, the scheme was commercially viable break point' along the way. In

up to around \$40 million but at

economically feasible nor financially affordable. The hard but necessary decision needs to be made to 'call time' on this project.

With local body elections the Hawkes Bay also provides a being a little over a year away, stark warning to councillors that the wrath of voters can be swift and decisive - so councillors need to think carefully how they

selves exploring alternative career opportunities in the not will vote lest they find themtoo distant future.

million project to

being a \$26

Valley Dam has

decade the Lee escalated from

Over the past

one in excess of

\$100 million. RUYTER/ STUFF

MARTIN DE

ton based economist who has and agricultural issues. He Water Storage Peter Fraser is a Wellinga specialisation in irrigation has extensive experience with the Ruataniwha, Waimea and Wairarapa

Schemes.

Colin Johnson <ce.colinjohnson@gmail.com>

27/8/2018 22:00

Re: List of decisions and information needed before go/no go decision can be made

To Kaye Solomon and Lewis <north.west@xtra.co.nz>

From me, Colin. Paul asked for it to be sent to cllrs. C

On 27/08/2018, at 8:56 PM, Kaye Solomon and Lewis < north.west@xtra.co.nz> wrote:

Is this list from Colin or Paul?

----- Original message -----

From: Colin Johnson < ce.colinjohnson@gmail.com>

Date: 27/08/18 18:43 (GMT+12:00)

To: Kaye Solomon and Lewis < north.west@xtra.co.nz> Cc: MacLennan Paul < north.west@xtra.co.nz>

Subject: Fwd: List of decisions and information needed before go/no go decision can be made

Lew. Please pass on to Councillors.

Hello Councillors

Some of the reasons why you lack the information to proceed with the Waimea Dam at present:—

- No agreement with Crown over 9.8 Ha of DOC administered land
- No Total Project price established P50 or P95
- No funding in place for latest still not complete price
- No costs advised for Local Bill costs
- No agreement or settlement with JWJ forestry over improperly seized land which permanently blocks their access
- · No agreement with Ngati Koata over their land to be flooded or indication of lease cost and conditions
- No agreement with Tasman Pine who own trees/cutting rights over Ngati Koata land
- No agreement to purchase cutting rights or purchase slopes above reservoir as advised by Cawthron & Tonkin & Taylor.
- No agreement over inundating Crown owned river bed
- No agreement over Queens Chain access around lake
- New consultation required as price now exceeds 2017 total consulted on by over 30%
- Hydro option not in any annual or ten year plan inclusion illegal
- No complete price for access road
- No complete price for replacement logging roads, skid sites and log marshalling areas including new road for Irvines
- No complete price for providing Electricity
- No realistic price to clear and seal 87.7 Ha reservoir lakebed (217 acres) Leaving Mulch is not an option per RC. Heavy rain will deposit chipped logs into Lee River
- TDC advised in Lgoima request 09.10.17 that Resource Consent costs for compliance totalling \$1.76 million had been capitalised BUT they do not appear in any pricing or budget to date
- No costs advised in project costs to date to pipe water to identified areas of low supply Incl parts of Waimea East Irrigation Scheme, Gladstone/McShanes, Lower Wai-iti and Mt Heslington / River Terrace



 The Dam total footprint is removing permanently about 100 or so Ha from the nations forestry. Under the ETS scheme they will be required to pay from memory about \$800 per ha to relinquish their obligation. I have seen no provision for in accounts to date

A decision tomorrow is premature. Thanks. Paul MacLennan



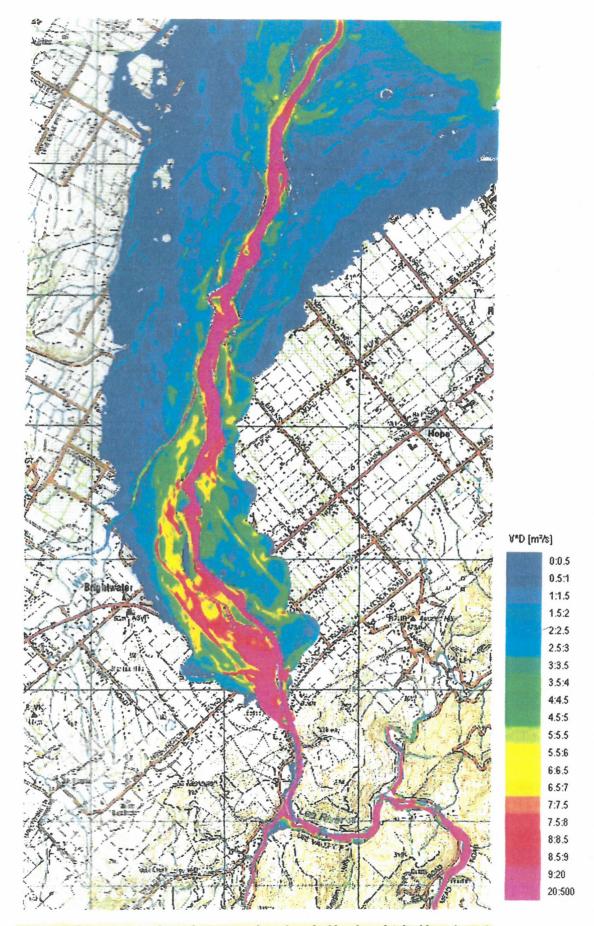


Figure 8-5 Assessment of inundation area based on dv (depth multiplied by velocity)

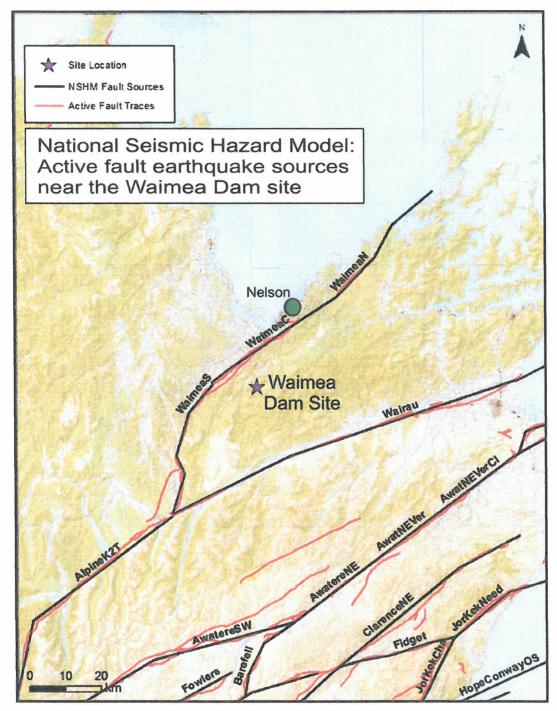


Figure 2.1 Characterisation of fault sources in the vicinity of the proposed Waimea Dam in the National Seismic Hazard Model (Stirling et al., 2010), with updating of the segmentation of the Waimea Fault.

Mr Mayor, Mr Mayor
How can we trust you?
Why don't you care?
We need you to listen,
We need you to hear.
Our voices are calling —
So let's make this clear.

The dam is a NO GO

We don't want it there,

That valley's unstable —

What we need is a weir.

The river is precious.

Our children swim there.

Their parents before them —

Lives are lived here.

Brightwater is special

And must be safe from all fear.

Yes, water is needed,
But go down – don't go up.
There is water beneath us
Why not

SUCK IT UP?

b-8 weeks DAMMED TRUTHS Rafes Will rise. Increase Bught thater Holine all Hestington Faultlines



Product Disclosure Statement

for the Offer of Water Shares in Waimea Irrigators Limited

2 FEBRUARY 2018

This document is a replacement Product Disclosure Statement and it replaces the Product Disclosure Statement dated 26 January 2018.

This product disclosure statement, dated 2 February 2018, is for the issue of Water Shares in Waimea Irrigators Limited.

This document gives you important information about this investment to help you decide whether you want to invest. There is other useful information about this offer on http://www.business.govt.nz/disclose, offer number OFR12297.

Waimea Irrigators Limited has prepared this document in accordance with the Financial Markets Conduct Act 2013 (Act). You can also seek advice from a financial adviser to help you to make an investment decision.

Reliability / Construction and Infrastructure Risks

Risk

*

Geotechnical: Following the Christchurch Earthquake in February 2011 there has been significant seismic activity in New Zealand and in the South Island in particular. There is a risk that a significant seismic event in the Nelson area could damage the Dam.

Product Disclosure Statement for the Offer of Water Shares



29

3



<u>Hydrological</u>: The Scheme is based on the release of Dam Water recharging the groundwater aquifers within the Scheme Area. <u>Hydrology</u> is not an exact science and there is a risk that the released Dam Water is diverted and does not reach the aquifers in the anticipated volumes.



Memorandum

TO:

Dugald Ley

FROM:

Joseph Thomas - Resource Scientist Water/Special Project

DATE:

9 June 2009

FILE NO:

W325

RE:

Shifting TDC Lower Confined Aquifer (LCA) - Well Field Lower Queen Street

TDC Lower Confined Aquifer (LCA) Bores

The TDC Richmond supply comes from the Lower Confined Aquifer (LCA). There are five bores located off Lower Queen Street NW of the Mc Shane's Road turnoff. The LCA is at a depth of between 32 – 38 metres below ground here. The bores are all artesian here, i.e. water flows out of the bore if unpumped.

Drawdown and Seawater Intrusion Risk

The LCA is a confined aquifer and extends out past Rabbit Island. The actual connectivity with the estuary (Waimea Inlet) and sea past Rabbit Island is unclear. Council operates a monitoring bore behind the Chipmill that measures both the water level and salinity. This bore acts as a sentinel bore for the LCA. This bore clearly picks up the pumping effects from the LCA well field. In drought conditions combined with peak pumping from the LCA well field, water levels drop significantly near the coast. Council generally starts implementing rationing as a precaution when water levels drop below mean sea level at this monitoring bore. Modelling indicates a level of about - 4 metres and lower pose a risk to this aquifer re; seawater intrusion. As this aquifer is reasonably sealed – significant reverse pressure would be required for seawater to seep into the aquifer. However if seawater does seep into the aquifer it would be also be much harder to flush it out. To date no abnormal increase in salinity has been measured at the monitoring bore at Chipmill; however the LCA has been rationed regularly in the past years as water levels dropped below mean sea level near the coast. The TDC LCA well field is the one closest to the sea and as such has the highest risk if seawater intrusion occurs. This risk increases if more severe droughts and climate change (sea level rise) scenarios are considered.

Shifting of TDC LCA Bores Further Inland

Shifting of LCA bores inland is the simplest solution to increasing the security of supply from seawater intrusion. Drawdown (i.e. water level drops due to pumping) is determined by the hydraulic characteristics of the aquifer and distance from the pumping source. Hence moving the bores further inland (assuming similar pumping regime as currently from the well filed) would result is lesser drawdown effects at the coast hence a lower seawater intrusion risk as a higher pressure would be maintained at the coast. However, it also has to be considered that the drawdown effect that may affect yield would occur at other LCA bores upstream that would be closer to the well field now. The size and magnitude of this and if it would be significant can only be made on further detailed examination, i.e. where the bores are, distance, authorised pumping rates. Proper well head protection of bores will also have to be undertaken as part of any shift of the bores to any new site.

Joseph Thomas

Resource Scientist Water/Special Project

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THE NEXT 10 YEARS



DEBT AND RATES

Debt levels will consistently remain below our self-imposed net debt cap of \$200 million. Projected net debt will change from \$189 million at 30 June 2018, reaching a peak of \$199 million in 2020/2021, decreasing to \$147 million by 2028. Rates income increases will range from 1.17% to 2.98% and will not exceed 3% (plus an allowance for growth) in any one year.



LEVELS OF SERVICE

We are investing in infrastructure to protect current levels of service, or in some cases allow us to achieve levels of service that we have so far been unable to attain. This is particularly the case for water supply, stormwater and transport.



MAJOR INFRASTRUCTURE PROJECTS AND OTHER ACTIVITIES

- · Upgrading and replacing drinking water treatment plants.
- Improving Mapua, Motueka and Richmond drinking water reticulation and storage infrastructure.
- Improving urban water supply and river flows Waimea Community Dam.
- Extending water and wastewater services to service growth in Motueka and Richmond.
- · Improving Richmond Central Stormwater secondary flow.
- Improving Motueka West Stormwater discharge system.
- · Improving cycleways and pedestrian facilities.
- Improving maintenance of gravel roads.
- Providing a regional boat ramp.
- · Adding recycling drop-off points in Pohara, Kaiteriteri and Murchison.
- Developing the Motueka Library.
- Ongoing development of Saxton Field and renewal of some infrastructure.
- Improving Port Tarakohe.
- · Upgrading campgrounds.



ENVIRONMENTAL MANAGEMENT

- Developing a new Biodiversity Strategy and commencing its implementation.
- · Improving land management to enhance river water quality.
- · Increasing pest and weed control.
- Transforming the Tasman Resource Management Plan from a paper-based plan to a digital plan.



DAY-TO-DAY SERVICES

- · Responding to customer enquiries.
- · Operating libraries, parks, recreational spaces and facilities.
- · Processing consents and carrying out compliance duties.
- · Fulfilling environmental health responsibilities.





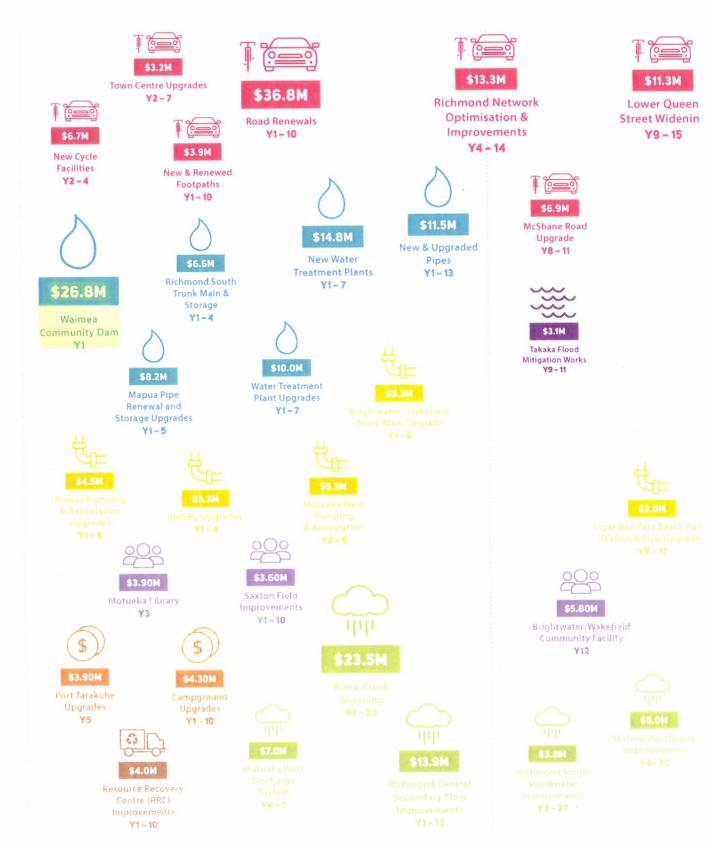
Net debt is total debt less unencumbered liquid financial assets and investments. Total net debt is expected to peak later than forecast in the LTP 2015 – 25 and to fall from the peak later. This is because some projects that had been planned to be undertaken before 2018 have been deferred to future years, growth is taking place more quickly than anticipated and there is a need to invest to achieve levels of service, e.g. to meet drinking water standards.





TIMELINE OF OUR MAJOR PROJECTS

This timeline shows some of the major capital works planned for the next 30 years.



YEAR 1 POPULATION 50,000 YEAR 10 POPULATION 51,000