

Waimea Water Augmentation Project

Media Briefing – 12 June 2017



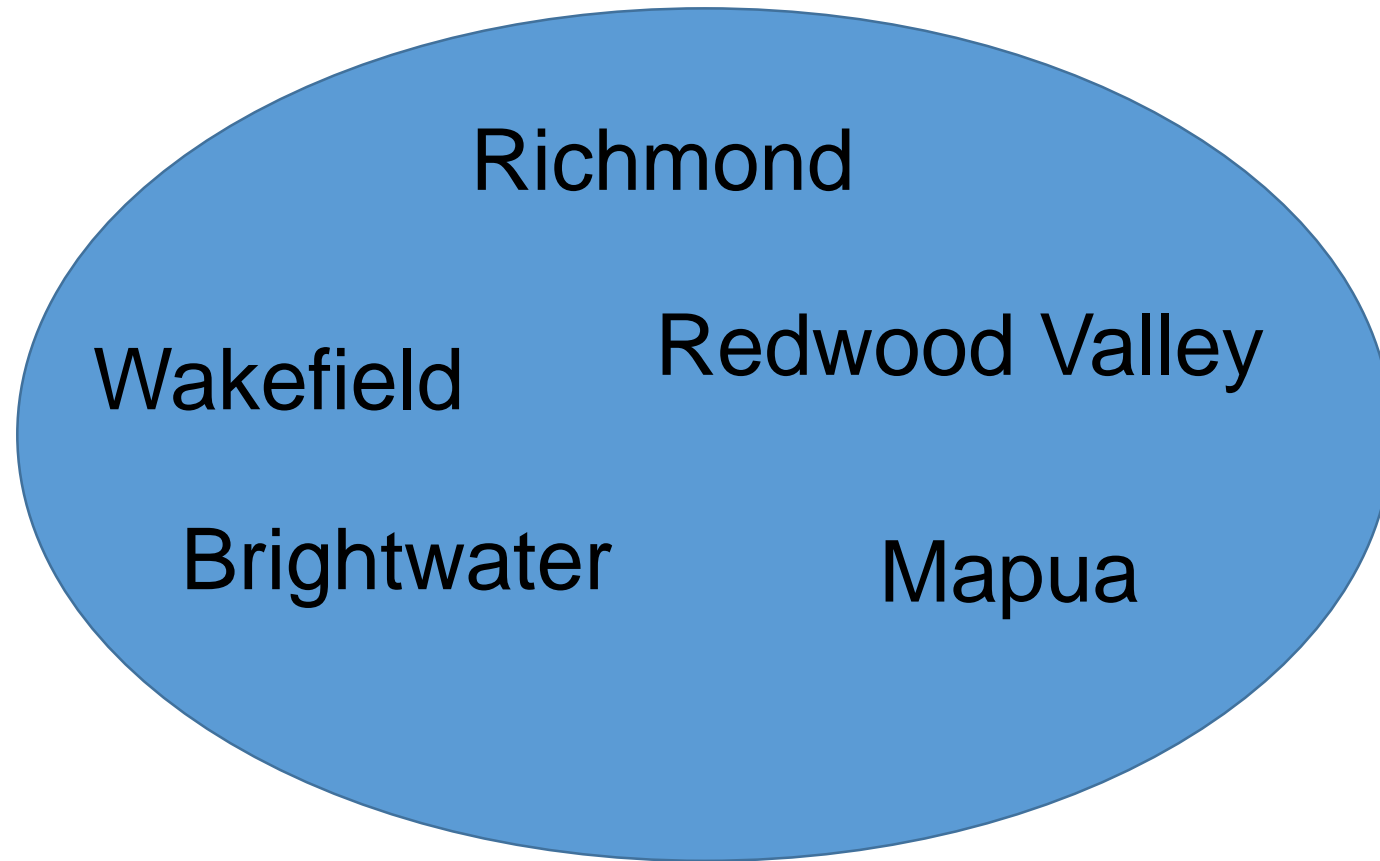
"Making Tasman Great"

- The Council is considering an increase in its financial commitment to the project and credit support.
- The motivation is to protect and enhance the supply of water to households and businesses.
- The cuts the Council will be forced to make will affect households and businesses every year if there is no dam.
- Everything points to water augmentation on the scale proposed as the solution.

- The Project (dam) will deliver long term water supply security for less than half the cost to customers of the alternatives.
- The PPP with irrigators is what makes this possible.
- The added benefits to the environment make this project a standout.
- Paying more to get the project over the line makes great sense.
- We do it together or not at all – the future of the whole region is at stake – including Nelson

Waimea Water Supply

Current and Future Capacity Requirements



Consequences for our community

Impact of TRMP rules

- Impact significant and immediate – a major dilemma for our community and Council
- Rationing most years
- 25%-50% reduction needed for 20,000+ people
- About 5,000 m³ **per day** at peak
- Unsustainable

Water Demand Growth

- Water gap keeps growing
- Need more water to meet future needs

No Dam – Impacts of TRMP

Step 1 rationing, greater of:

- 10% of consumption reduction (average last 8 years)
- 20% of consent

Step 2 rationing, greater of:

- 17.5% of consumption reduction (average last 8 years)
- 35% of consent

Step 3 rationing, greater of:

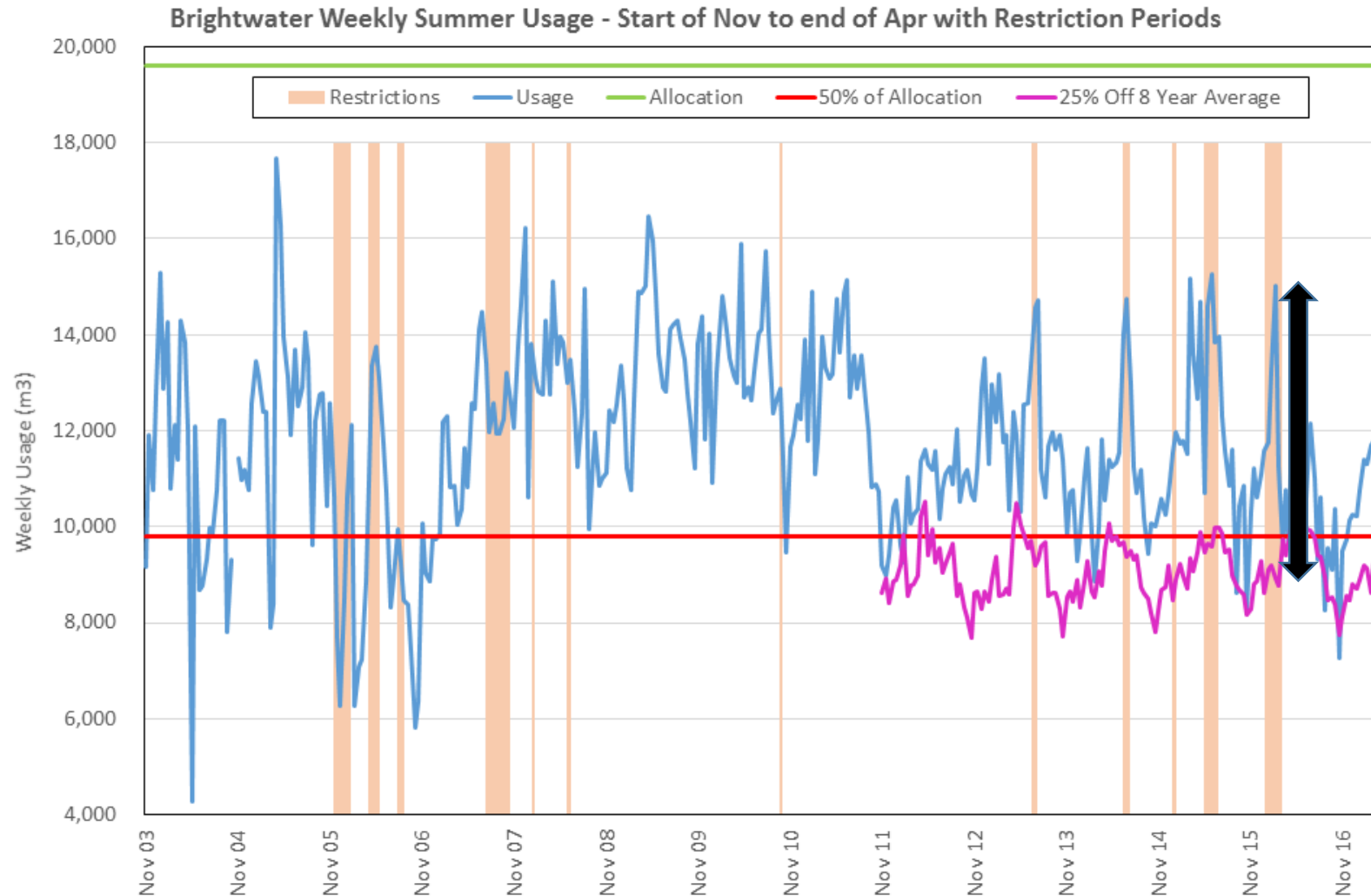
- 25% of consumption reduction (average last 8 years)
- 50% of consent

Step 4 (does not apply to community water supplies)

Step 5 - essential human health – 125 litres/day/person (occurred 2000/2001)

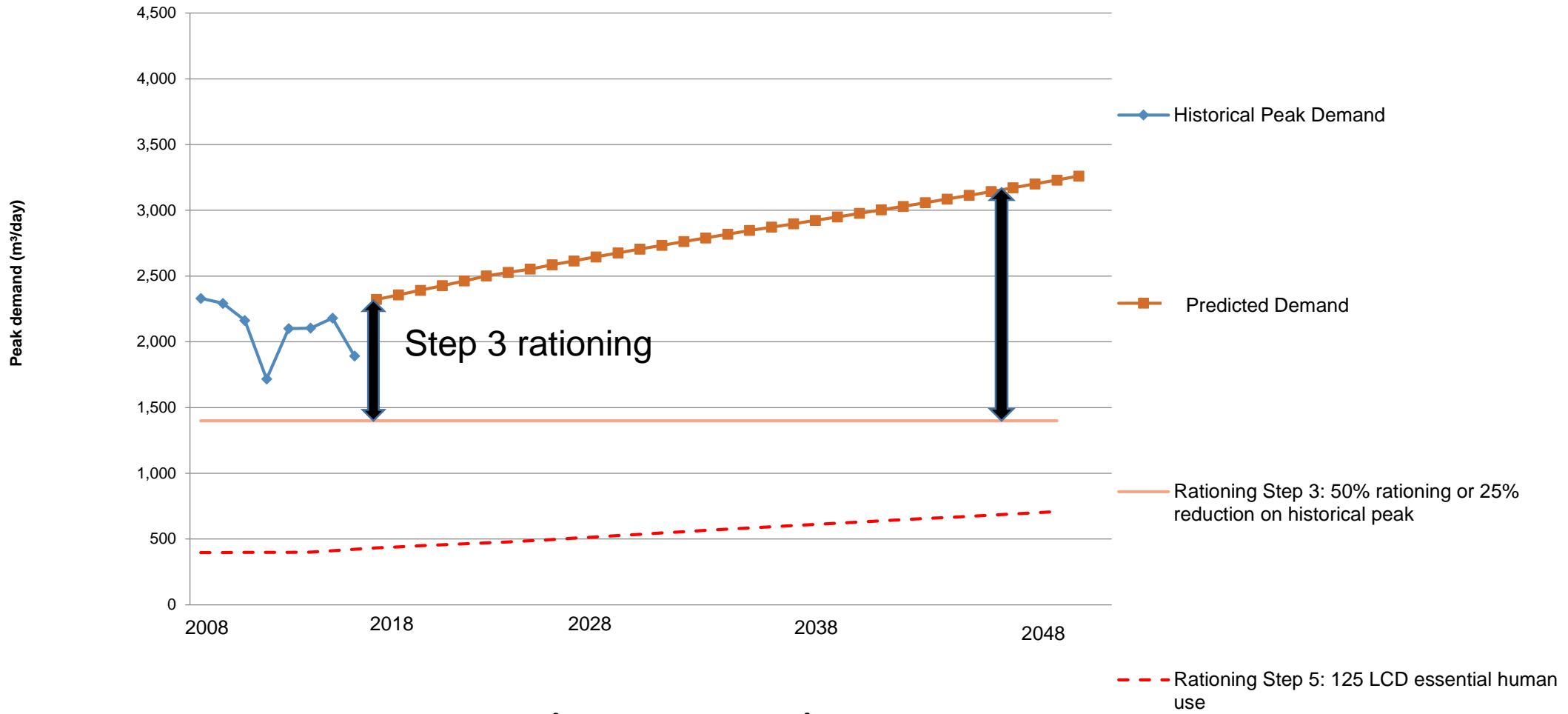
20,000+ people - effective November 2018, if not before

Past Rationing Results vs New Requirements Brightwater



Water gap (step 3)
= Customer demand vs ability to supply

Brightwater 30-Year Demand vs Supply



Medium Growth

How big is the water gap?

Step 3 peak gap is 5,000 m³ per day

=



5,000

=



5,000

=



140,000



555,000



5m

What does that mean for a household?

| Use | % Household Consumption | Step 3 | Step 5 |
|------------------|-------------------------|--------|--------|
| Bath and showers | 25% | ✓ | ✓ |
| Toilets | 25% | ✓ | ✓ |
| Laundry | 20% | ✗ | ✗ |
| Kitchen | 10% | ✗ | ✗ |
| Outdoor use | 20% | ✗ | ✗ |

Combined 100-Year Demand



Summary

Impact of TRMP rules

- Impact significant and immediate – a major dilemma for our community and Council
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Water Demand Growth

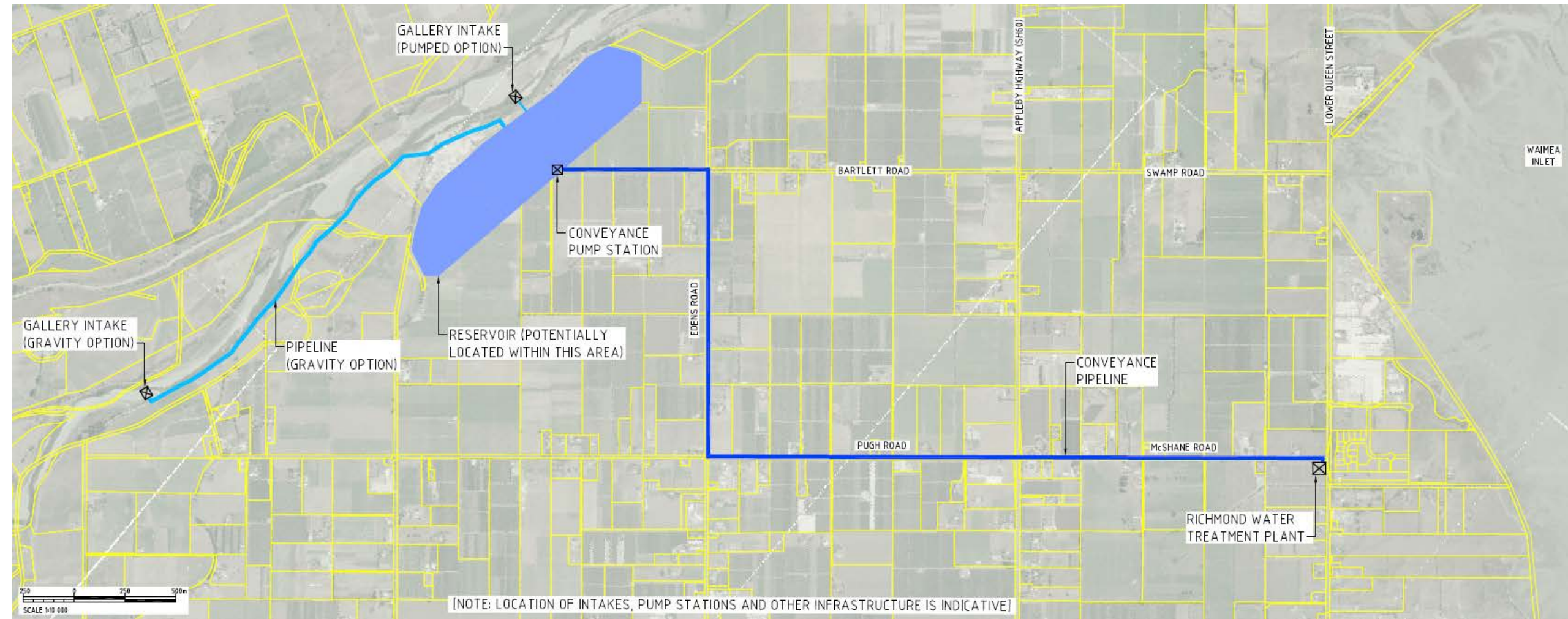
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Alternatives to the Dam – Urban Water Supplies

Work to date: 2014/2015 Review

- **Scope:**
 - Tasman District Council going it alone
 - Current customers
 - Rationing focus
- **2014/2015: Long list report on alternatives (MWH)**
 - Many apparently low cost alternatives were not feasible
 - Water harvesting / storage most likely
- **2015: Short list report on alternatives (MWH, Cawthron and GNZ)**
 - Preliminary concept and feasibility for one possibility – storage lake

Primary concept



Issues

- Level of service
 - 9/10 years
 - Does not provide for step 5 rationing
- Feasibility
 - Water take – ability to gain consents
 - Land
 - Geotech
- Operation
 - Filling periods
 - Water quality
- Delivery
 - Investigation, design, consents
 - Several years from construction (for any alternative)

Cost

| Initial cost | \$2017 |
|-----------------------------------|--------|
| Investigation / design / consents | \$2m |
| Construction / land | \$18m |
| Total | \$20m |

Reduced Level of Service compared to Waimea Dam

- Capital cost for one 5000,000 m³ storage facility
- Provision of 100 days at 4,000m³/day
- Only provides certainty for up to 15 years, then another storage facility required

| Whole of life costs | Capex | Opex | Total |
|---------------------|-------|-------|--------|
| 50 year cost | \$71m | \$35m | \$106m |
| 50 year PV (5%) | \$39m | \$10m | \$49m |

Comparison with Waimea Community Dam

Water supply:

- More costly
- Several years away – restrictions apply
- No protection from major droughts
- Ongoing upgrades needed
- Salination risk remains
- Doesn't provide for long term water needs

Other considerations

- No improvement in river health
- Negative for irrigators / wider economic benefit
- TRMP rules apply – no development beyond 15 years in Richmond, Brightwater and Mapua

Where to from here (if there is no dam)

- Park limited work to date
- New investigation with wider scope
- Likely to be a augmentation / storage
- Further investment and time to get reasonable confidence in feasibility and costs
- Several years until construction

Appleby Fresh – family and community



The business

- Fourth generation business
- Market gardens on 160 ha of the Waimea Plains
- Grow 30 varieties of vegetables including 'niche' vegetables
- Turnover in year to April 2017 was approximately \$8 m
- Product is sold across New Zealand



Appleby Fresh staff – our community



- Approximately 120 staff in summer and 70 in winter
- Annual wages \$2.5 million
- Jobs range from planting, harvesting, packaging, administration and management
- 80% of staff live within Nelson City
- Many are refugees from Thailand or Myanmar making a new life in New Zealand

Downstream benefits

- Purchase of plant and equipment
- Purchase of fertiliser and agrichemicals
- Services associated with banking, legal and administration of business
- Product processing (e.g. hospital meals)
- Distribution of product (road freight)
- Consumer spending of family and staff
- Education (kids in local schools)



Appleby Fresh and water



- Water is used for irrigation, vegetable and machinery washing and staff amenities
- Allocation cuts and more severe rationing will mean
 - less hectares planted
 - a reduction in staff
 - possible sale of land with multiple titles that cannot be watered (increasing subdivision)

Security of water supply for Appleby Fresh

- Investment in plant and machinery
- Investment in new technology
- An ability to guarantee customers with product volume
- An ability to plan for the future including succession
- Growth in the business
- Job security for staff



Appleby Fresh into the future

- Healthy and nutritious food production is a critical activity for the region – and the world
- We want our family to have the opportunity to grow crops on the Waimea Plains for several more generations
- Water is our lifeblood.

Contact: Mark O'Connor [021 241 2361](tel:0212412361)



Key questions to be answered

- Is there a viable no-dam alternative?
- Who are the beneficiaries of the dam?
- Is there an affordable plan to finance the dam?
- Do the current discussions meet the 'fairness' test?

The economic cost of the 'no-dam' alternative



The economic cost of the No-Dam alternative is \$1,025 million over 25 years (June 2017 estimate)



The economic cost of the No-Dam alternative has increased since May 2016

- What assumptions have changed?
 - Anticipated improvements in regional GDP from horticulture – NZIER 1 June 2017
 - Cost of TDC urban and industrial supply was modelled in May 2016 at \$33m, now has a present value cost of \$49m
 - Cost of NCC urban and industrial supply shows \$4m immediate spend to provide water to Nelson South plus \$15m upgrade to water treatment from the Maitai

Questions