The issues

- The Waimea Plains is acutely short of water short - water rationing has occurred in 6 of the last 8 years.
- Water shortfall 22 – 60% (~600 – 1600 l/s) depending on what the low flow requirements in the Waimea River are set at.
- Area irrigated ~3700 ha - potential for a further 1800 ha to be irrigated.
- Water is important for current urban supply and growth needs – significant • economic value - $250 million.
- Significant environmental, community and culural needs currently can not be met.
- In the 2000/2001 drought the Waimea River went dry, sea water intrusion posed major risk to supplies.
- Waimea part of TRMP – water has been put on hold, with agreement of all parties. However, if water shortage and low flow issues are not resolved it will default back to RMA process – consequences of this?

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Waimea Water Augmentation Committee

Lee Valley Community Water Augmentation Storage Dam

Presentation to CIF Panel
Christchurch, 25 March 2009
Murray King – Chairman WWAC

WWAC

- Formed 2003
- Comprising elected water user representatives, Councillors, Fish and Game, Iwi and DOC.
- Has good community support and an excellent track record.
- Key mandate is to find a long-term solution to the acute water shortage on the Waimea Plains.

WWAC Committee

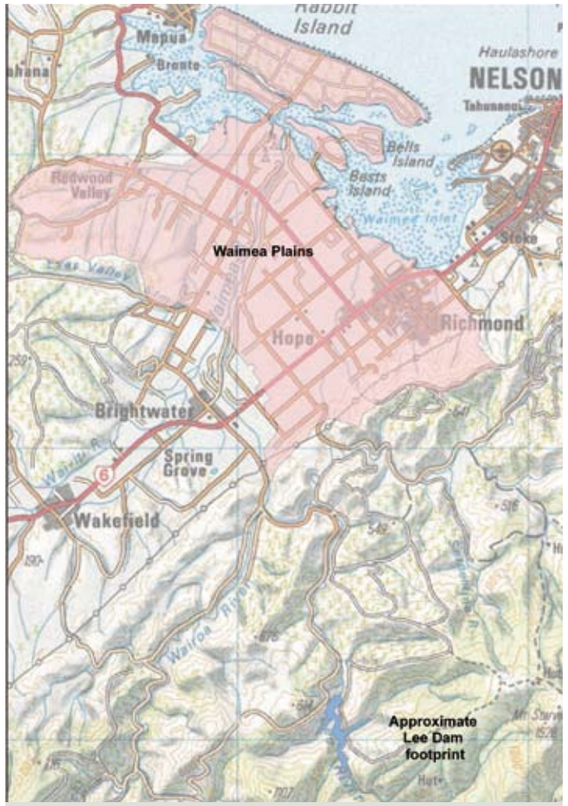
Upper Lee Catchment was identified in pre-feasibility studies completed in 2007 for an augmentation dam.

Feasibility

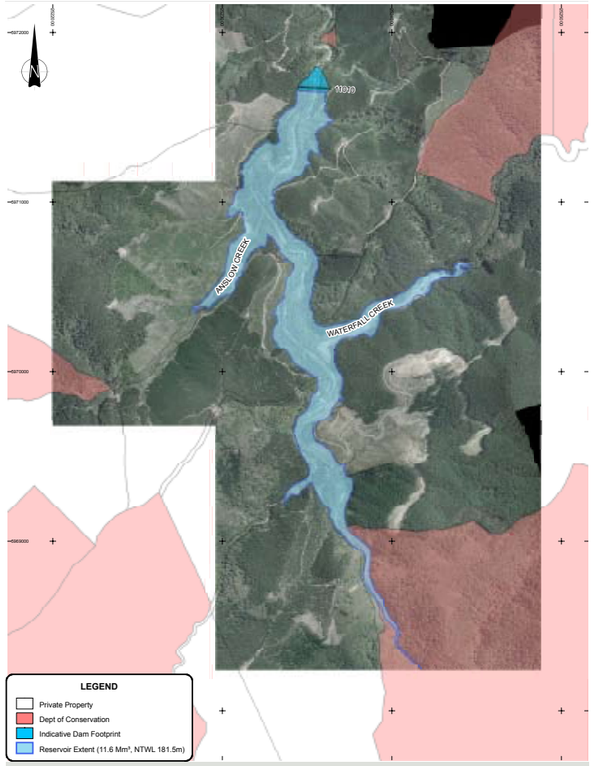
- WWAC acknowledges support from SFF for both pre-feasibility and current feasibility study.
- SFF audit praised the project and management.
- Detailed feasibility now progressing – Dec 2009 completion.
- Key components are in place to progress next stage with CIF support.

Key economic data

- Groundwater total value is $250 million.
- Net present value for further irrigation of 1800ha productivity increase $20-$30 million a year.
- Aggregate earnings from current mixture of crops is $32 million a year.
- Loss of agricultural production for a higher low flow in a 1:25 year drought, is estimated between $14 - $25 million (45% - 75% of average farm or orchard earnings.
- Non-augmentation cost over a 25 year period is estimated at $80 - $135 million.
- The cost has not been estimated for residential and industrial development, but it would be significant.
- Cut-backs through the planning process would have a significant economic cost, destroy the viability of producers and industries, and curtail regional economic growth.



Approximate footprint of Lee Dam



Lee Dam details

Dam details

- Location and outline of dam.
- 13 million cubic metres storage.
- 50 m high.
- Small hydro potential ~ 1.5 MW.
- 70 ha lake.
- Dam storage capacity based on 60 year drought return.
- Designed on servicing all needs in 1:20 to 1:25 year climatic drought on the plains.
- Concrete faced rock fill (CFRD)or earth embankment to be finalised by June. (CFRD looks more favorable.)

Key elements in place

- There is a preferred governance structure.
- Dam site confirmed.
- Range of financial models evaluated.

Next steps

It is most appropriate to seek CIF funds to develop a prospectus and promote the scheme.

WWAC and Council are committed and confirm equal cash funding for this proposal.

Timing is important

The current completion date for the final feasibility report is December 2009.

WWAC is confident it can run the CIF project in tandem as the key feasibility components relevant to this application will be completed by June 2009 i.e. feasibility level, dam design and refined dam costing.

The above timing will sit comfortably with further refinement of the financial model and development of the prospectus via CIF support.

Project timing outline

July 2009 to Feb 2010

Finalise a range of financial models, workshop and develop parameters of operation, commission development of prospectus and develop draft prospectus.

March – December 2010

Consultation on prospectus with water users/refinement

January 2011 – March 2011

Complete final reports and final prospectus for adoption.