



Presentation to the
Water Infrastructure Forum
Saturday 20th December 2008

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16/02/2009

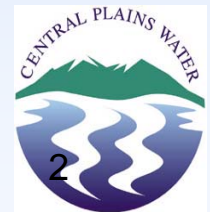




Central Plains - Current Situation

- » Water supplies fully allocated – ECan “Red Zones”, NCO, River Plans.
- » Remaining “run-of-river/groundwater” reliability low
- » Challenges to current allocations – ECan’s Rakaia-Selwyn Consent Review, increase in stream minimum flows.
- » High energy cost to extract water from deep bores.
- » Farmer demand for water strong – still significant areas that could be irrigated.
- » Community concerns of the impact of intensified agriculture
 - On water quality especially nitrates.
 - Sustainability questioned.
- » Impact of Global Warming?

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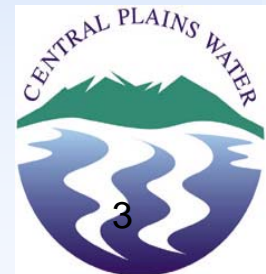




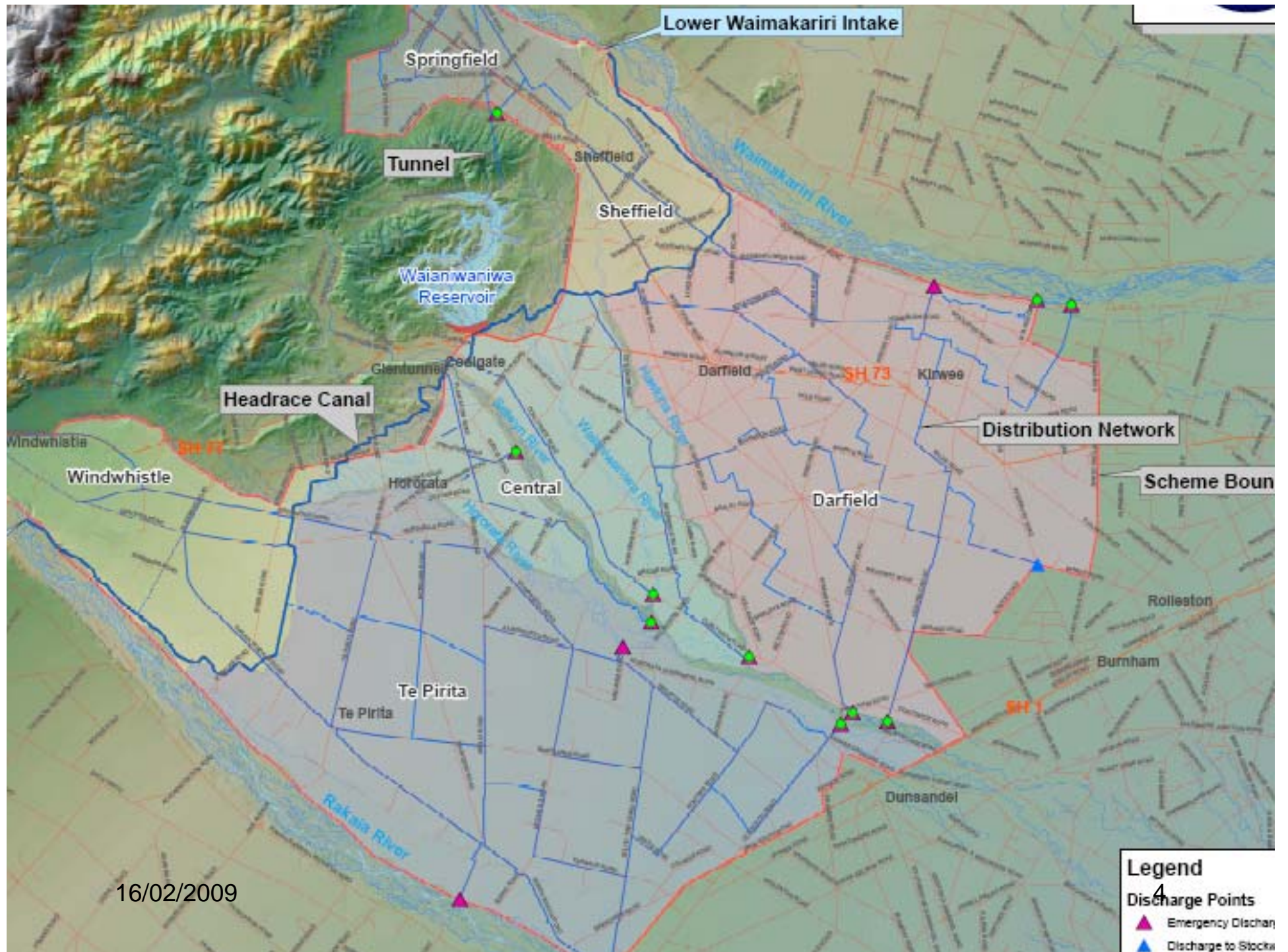
STORAGE

The key to the Central Plains Water
proposal

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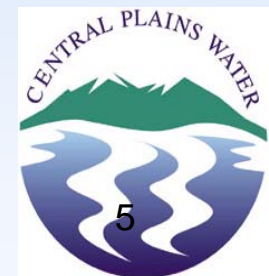




Central Plains Water Scheme Features

- » Resource consents to be held by CPWT, CPWL to have excl. use rights.
- » Base Scheme area 60,000 hectares (approx.) – 350 shareholders.
- » Allocated on a fixed volume basis - 1 share =1 unit =1,000m³. Max. flow rate 0.6 litres/s/ha.
- » Reservoir dam height - 50m, capacity 280M m³ (1,200ha).
- » High reliability - max “no supply” period calculated at 16 days/33 years (1970-2003).
- » Low energy req. – gravity supply to storage, piped reticulation.
- » Expect trading in water and shares between irrigators.
- » Irrigators will be required to sign up to a sustainability code of practice.

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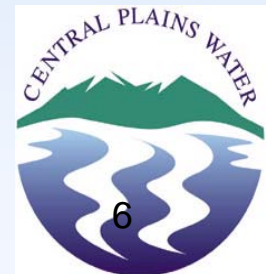




Economic Benefits

- » Increase in farm gate output - \$210M
- » 2,300 additional jobs (600 on-farm).
- » Annual increase in direct and indirect impacts - \$700M.
- » Annual added value - \$258M.
- » Possible HEP.

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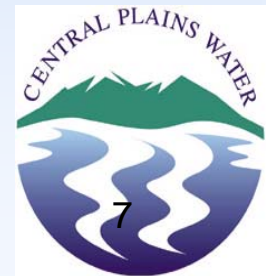




Environmental Benefits

- » Reduced demand on groundwater and lowland rivers.
- » Enhanced groundwater levels/spring-fed stream flows.
- » Improved soil structure.
- » Proposed environmental enhancement initiatives.
- » Farmer shareholders must operate to sustainable code of practice.
- » No damming of main rivers.
- » No risk to Chch water supply.
- » Scheme works within Rakaia NCO limits

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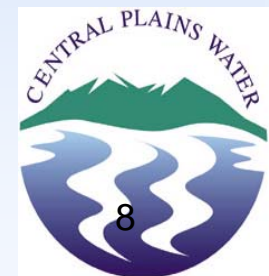




Social/Recreational Benefits

- » More rural jobs - more skilled (higher income) jobs.
- » Potential to increase rural population.
- » Recreational options have been identified: -
 - Reservoir - fishing, boating, walking.
 - Water sports developments - canoeing, rowing.
 - Headrace Canal - fishing, boating, walking tracks

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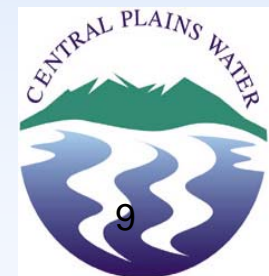




Major Risks

- » Resource consenting process - cost & time.
- » River take issues esp. Waimakariri
- » Land acquisition – reservoir & headrace canal.
- » “Host” community issues – esp. Coalgate.
- » Groundwater quality – perception of high nitrate levels.
- » Cost of construction - +\$400M.

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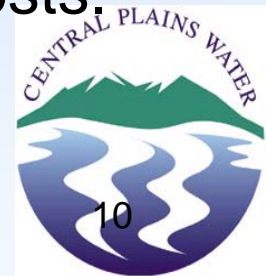




RMA Issues

- » Requirement to define “priority”.
- » Split of “Take” and “Use” would have been useful.
- » S92 requests for further information caused delay and added significant cost.
- » Lack of any limits on RMA Hearing process timeframes and costs has led to significant increase in CPW costs.

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Summary

The CPW Scheme is efficient, sustainable, community focused and conceptually modern (including storage and adoption of best practice sustainability protocols) with many benefits.

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Central Plains Water

For more information refer to: -

www.cpw.org.nz

OR

http://en.wikipedia.org/wiki/Central_Plains_Water

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