

Targeted Stream Augmentation (including near river recharge)

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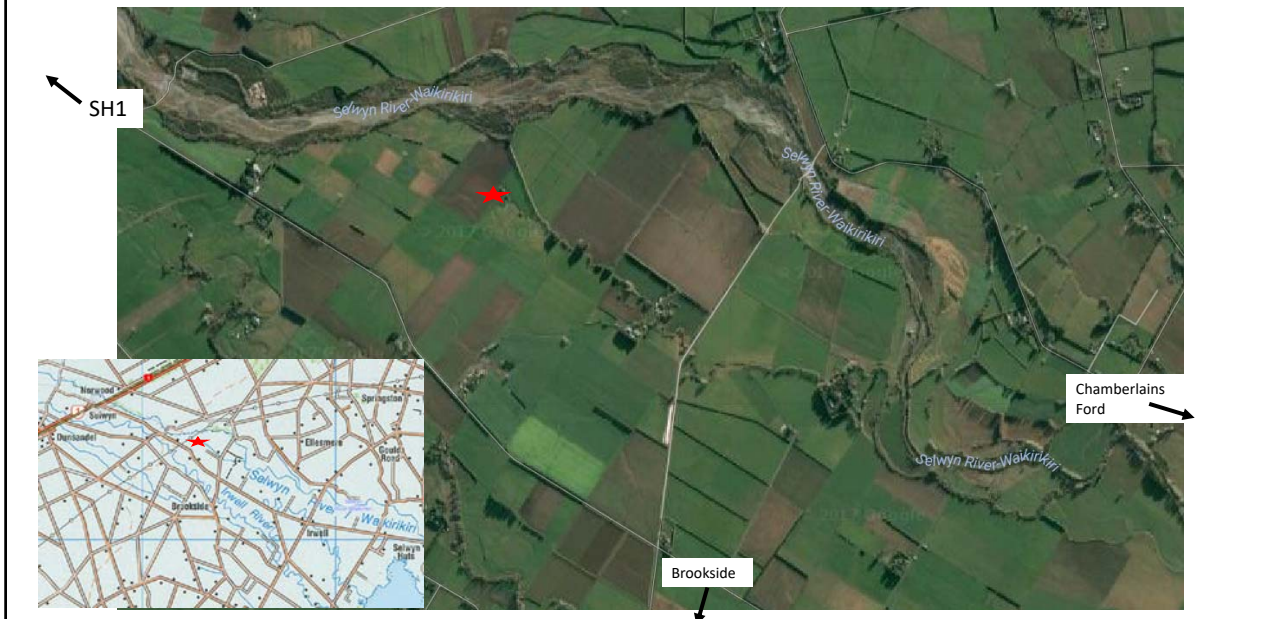
Canterbury Water Management Strategy – Environment Canterbury

Te Waihora Living Lake Symposium, 9-10 November 2017, Lincoln University

Key messages

- ‘Silver bullet’ water management solution for Te Waihora? Yeah Right.
- An integrated and adaptive suite of initiatives are required. This includes:
 - Targeted Stream Augmentation: using solar power to pump groundwater that would naturally supply the target waterway if the groundwater levels were higher.
 - Near River Recharge: supply of alpine water to a recharge basin near (but not directly mixed with) a river system.

Waikirikiri/Selwyn - Near River Recharge



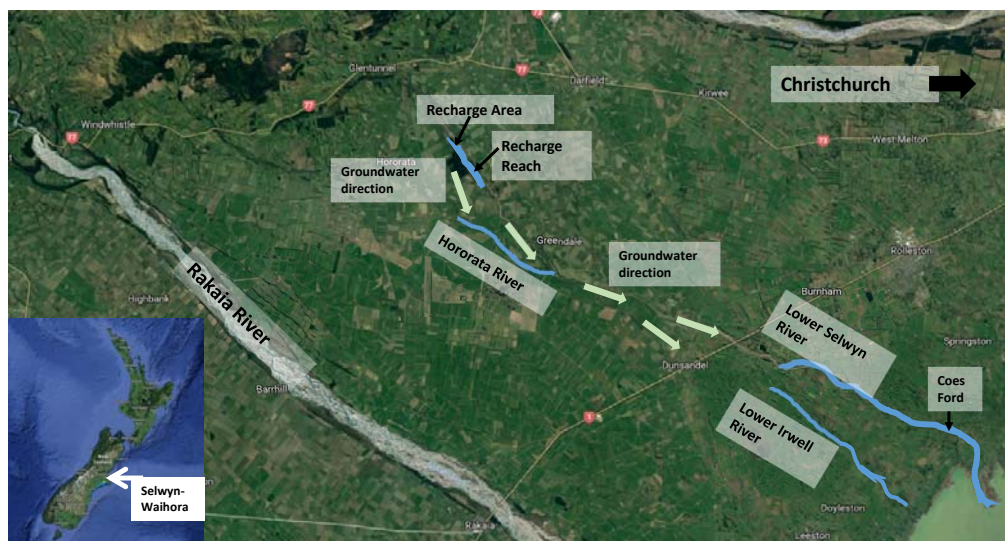
42m bore, 13 kW pump for up to 37 l/s
100 m² Photovoltaic (solar) panels for 23 kW energy



Waikirikiri / Selwyn River: Near River Recharge Project Aims

- Increase groundwater recharge during dry winters without increasing flooding (ground or surface water) risk.
- Avoid direct mixing of Rakaia (source water) and Selwyn River water.
- Minimise future drought effects on aquatic ecosystems in the Selwyn/Hororata/Irwell system.
- Provide new Mahinga Kai opportunities at recharge site.

Waikirikiri/Selwyn River – Near River Recharge Project



Waikirikiri/Selwyn Near River Recharge

