

Te Waihora Living Lake Symposium 2011 – Restoration updates



Recent Ngāi Tahu restoration actions
at Te Waihora

Restoration plans

- * Andy Spanton – I am employed by Te Rūnanga o Ngāi Tahu and work as an environmental advisor for the Te Waihora Management Board.
- * Working in partnership with DoC, I have developed Restoration Plans for 11 sites around the lake.
- * Recently I have been helping to coordinate and write the Whakaora Te Waihora plan.
- * I would like to thank the Te Waihora Management Board for their support of my work and acknowledge their on-going commitment to the management of Te Waihora.

Restoration activities at Te Waihora

- * Includes active intervention through to passive regeneration – for example:
 1. Re-introduction of native plant communities
 2. Weed control
 3. Stock management
 4. Erosion control methods
 5. Fence removal
 6. Passive regeneration...

Restoration objectives

- * “Ngāi Tahu cultural identity is restored through the rejuvenation of the mauri and life-supporting capacity of Te Waihora” (from the Te Waihora Joint Management Plan 2005).
- * Protecting and enhancing the ecological values of Te Waihora, thereby strengthening the Ngāi Tahu cultural relationship with the lake.

Enhancing key values

- * **Mahinga kai**
- * **Taonga species**
- * **Biodiversity**
- * **Naturalness**
- * **Recreation**

Restoration activity sites



Te Waiomākua

- * Free draining soils result in a very low moisture holding capacity and limits the range of species that will establish and grow here.
- * In May 2010 600 plants were installed in autumn to allow the plants to establish over the onset of the dry summer period.
- * The majority species established well but the ngaio were impacted by the winter frosts.
- * Plantings may provide shelter for a possible nohanga(tribal campsite).

Te Waiomākua – plants installed



Te Waiomākua – plants installed



Te Waiomākua - currently



Ahuriri restoration

- * Ahuriri is 2 ha Ancillary Claims site that adjoins the Greenpark Huts, and is managed as part of the Joint Management plan area.
- * A relatively broad range of species have been planted to tolerate the seasonal viabilities of the site.
- * In 2008 1840 seedlings were planted and of the 22 different species trialled 12 have proven to be highly successful, with an initial 87% survival rate.
- * In 2009 an additional 1000 seedlings were planted made up from the best performing species.
- * Why restore – nohonga (tribal campsite) provision, improved access to the lake, shelter, mahinga kai.

Ahuriri - planting



Ahuriri – early growth



Ahuriri - currently



Lower Waikekewai restoration

- * A small stand of crack willow were drilled and poisoned in 2009.
- * This site is low lying and was subject to inundation during period of high lake levels. 400 wet tolerant seedlings including 100 kahikatea were planted in 2009.
- * All the species have established and grown well. This planting is an important installation to investigate the opportunity to replace willow invasion with native plant communities.
- * In 2009/10 additional areas of willow were poisoned .

Lower Waikekewai restoration

- * A selection of species from the coastal plant community (1950 seedlings) were planted in the spring of 2010.
- * A number of these seedlings were grown from seed that had been collected from and around Taumutu.
- * Ngaio has been a stand out performer with its vigorous growth and tolerance to the desiccating salt laden southerly winds present at this site.
- * The initial installations will be expanded on to further build on the biodiversity in the area, with on-going work this summer and beyond.

Lower Waikekewai – pre planting



Lower Waikekewai – native plants installed



Lower Waikekewai - currently



Waikirikiri/Selwyn Delta

- * In 2009/10 gorse was hand cut and poisoned and grass weeds sprayed in preparation for native plant establishment.
- * The spoil bank site has provided a unique opportunity – due to its elevated nature - to establish a Totara forest plant community with a Kahikatea plant community along the lower bank.

Waikirikiri/Selwyn Delta

- * An initial planting of 500 seedlings were established in November 2009.
- * Elevated mounds in the lower and wetter delta area have had gorse removed and native plants installed.
- * To date approximately 6000 plants have been established at this site.

Waikirikiri/Selwyn Delta – pre native plant installation



Waikirikiri/Selwyn Delta – installation area preparation



Waikirikiri/Selwyn Delta – early growth



Waikirikiri/Selwyn Delta - currently



* *‘Mō tātou, ā, mō kā uri ā muri ake nei - for us and our children after us’.*