How will we know when we have achieved success?

“Significant indigenous vegetation of the lake margin, wetlands and tributary streams is protected and restored”
State of the vegetation

• Lake margin and adjoining areas surveyed in 1983 and 2007
• Survey to be repeated in 2017
Pressures

- Weeds
- Stock grazing
- Vehicles
Weeds

- Serious threat to indigenous biodiversity around the lake
- Weed control program underway
- Guided by strategy
Reed canary grass

*Phalaris arundinacea*

Photo: Carol Jensen
Grey willow
*Salix cinerea*

Photo: NZPCN
Yellow flag iris

*Iris pseudacorus*

Photo: Carol Jensen
Green goddess
Zantedeschia aethiopica cv. Green Goddess

Photo: Carol Jensen
Purple loosestrife
*Lythrum salicaria*

Photo: Carol Jensen
Beggar’s tick

*Bidens frondosa*

Photo: NZPCN
Reed canary grass

- Highlighted as concern in 2013 State of the Lake report
- Well established and widespread in northern and north-western tributaries
Stock grazing and vehicles
Stock grazing

Photo: Carol Jensen
Stock grazing

Photos: Carol Jensen
Vehicle access

Photos: Carol Jensen
Canterbury Maps Demonstration

http://canterburymaps.govt.nz/
Influence of lake level management in last two years

• Several episodes of unusually prolonged lake openings 2012-2013
• Period of unusually high lake levels and associated flooding in June 2013
So how are we going with measures of success?

- Annual net gain of key habitats (e.g. raupō) and maintenance of other important habitat types (e.g. saltmarsh)
- Maintain or increase populations of threatened or at risk plant species
- Annually reduce and stop spread of key problem willow species and other significant animal and pest weeds of native vegetation
- Aquatic macrophyte beds re-established and show positive growth rates
General recommendations

• Measures to address damage caused by vehicles access
• Additional resourcing for weed control and lake margin acquisition
Monitoring recommendations

• Establish permanent 10x10m plots on public conservation land
  – Ensure comprehensive monitoring undertaken at regular intervals e.g. 3 yearly

• Continue to monitor lake margins and key tributaries for weed spread
Monitoring recommendations

• Establish photo points to monitor change
  – Where willows have been removed
  – Where vehicle/stock access has been removed from lake shore