



Wainono Lagoon Flagship Annual Report 2016-2017

Wainono Lagoon is a coastal wetland and open water habitat of national and international significance for birdlife, native fish and plant communities. It is also highly valued by Ngāi Tahu hapū for its richness as a mahinga kai site. Regional Flagship funding complements the Ministry for the Environment funded work in the wider catchment and is primarily focused on weed control and maintenance of existing investments. Improving the Wainono Lagoon is a true partnership, with landowners, central and local government, community groups and the Zone and Regional Committee working together. Wainono Lagoon is a priority for the zone implementation programme developed by the Lower Waitaki South Coastal Canterbury Zone Committee.

Key Achievements for this Year

- Completed maintenance control of outlier gorse, lupin and broom on gravel barrier and started pushing back larger infestations. Lupin seed bank proving very productive this year. Department of Conservation funding also contributed.
- Grey willow control completed over Johnstone wetland covenant. This work also included outlier gorse and broom control within the wetland. 114 hectares were treated in February 2017.
- Maintenance and repair on flow control weir on the Hook River.
- Planting and planting maintenance completed on Hook Drain tributaries.
- Extension of wetland covenant and fencing to include adjoining wetland areas and terrace.

Progress of Overall Programme (multi-year)

- Crack willow control is progressing well and while occasional re-growth was evident this year, there are few new plants. The extensive stands of dead spars from the original control (2011/12) are now rapidly collapsing as trunks rot out at the base and the area is starting to look more like a wetland and less like a dead willow forest.
- Grey willow continues to be very challenging, germination rates possibly increasing due to lack of crack willow canopy cover.
- Weed infestations on the Wainono gravel bar have been significantly reduced in extent as outlier areas come under control. As expected, the lupin seedbank will endure for some time. Some of the older gorse bushes are proving hard to kill in one treatment, which is probably due to salt stress. There is reluctance to use picloram herbicides due to risk to non-target species in most areas, so repeated treatments will be required for some infestations.



Wainono beach gravel barrier looking south. Gorse and lupins are scattered among native coastal vegetation on both sides of the vehicle track. Control extends over 12.2 km of the gravel bar.



Johnstone wetland showing collapsed dead spars. Hook River sediment trap and flow diversion in foreground.

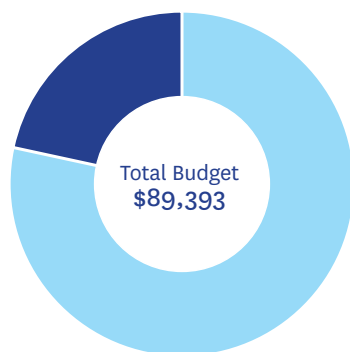
Winning the War on Willows

We are winning the long-term war on willows. The collapse of dead spars has accelerated in the last two years, meaning helicopters can get much closer for spot spraying regrowth and new germinations under the old canopy areas. Regeneration of carex and flax in these areas has been dramatic as they respond to removal of competition from willows. What were dead looking *Carex secta* stumps under a full willow canopy are now flourishing specimens, as are patches of the endangered climbing nettle, *Urtica lineafolia*.

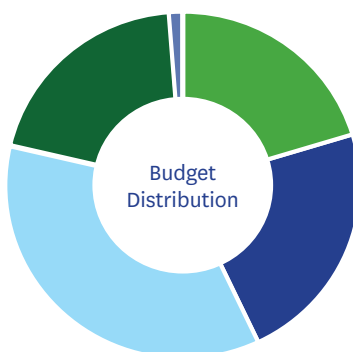


Grey Willow

Budget Information



- Total Wainono budget \$70,254
- Total 3rd party contributions, \$19,139



- Planting
- Weed Control
- Earthworks maintenance
- DOC weed control
- Wetland covenant

Next Steps

- A detailed survey this year to stocktake progress and particularly look at long-term grey willow control strategies.
- Continue wetland and beach barrier weed control.

