



WETLAND RESTORATION PLAN

Name of Farm
Name of Project
Month/Year



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INTRODUCTION

Canterbury wetlands - every wetland counts

Since European settlement in the mid-19th century, wetlands across New Zealand have been drained for urban and rural development. In Canterbury, it appears we have lost up to 90 per cent of our freshwater and natural wetlands and half of our coastal wetlands.

Most of Canterbury's remaining wetlands are coastal or in the foothills, high country, or margins of rivers. We might drive past a piece of scraggly-looking vegetation without realising it is a small remnant of a former, much larger wetland.

While we now recognise wetland values and how vital they are to maintaining waterways and biological riches, our remaining wetlands continue to be threatened by human activities and invasive pest species. Experience shows it is easier to work with nature to protect and restore our remaining wetlands and remnants rather than starting from scratch.

Managing Wetlands as Farm Assets is a project led by NZ Landcare Trust, working with project partners including Environment Canterbury, NZ Deer Farmers Association, Deer Industry New Zealand, NZ Merino, DairyNZ and Overseer, with support from Federated Farmers and Fonterra. In addition to partner funding, this project receives funding from Sustainable Food and Fibre Futures administered by the Ministry of Primary Industries.

This practical project is working with a cross-section of farmers to provide advice and share knowledge about the benefits wetlands offer the farming system and the wider community.

Fourteen wetland case study demonstration sites have been set up, focusing on the protection and restoration of wetlands. The demonstration sites cover a range of wetlands across the different farming systems and varying ecological zones of Canterbury. Three constructed wetland types are also included. The project runs until mid-2023.

See here for more about the [Case study demonstration sites](#).



ABOUT THE PLAN

This Wetland Restoration Plan has been put together to help landowners and those supporting them to be used as a reference guide and a useful way of collating the materials and information that a landowner might need before carrying out any work.

The landowner must account for a number of factors to ensure they are not in breach of any regulations or local rules prior to any work being carried out in a wetland. In addition, wetland restoration requires an understanding of the current status of the wetland and the steps that will be taken to restore it. With the protection of mahinga kai now part of Farm Environment Plans for some Canterbury districts, it is also helpful if farmers understand why wetlands are regarded as taonga – treasured natural resources. A plan is also an opportunity to include the wisdom of Mātauranga Māori alongside farming and scientific knowledge.

In addition, wetlands can become a labour of love but require the allocation of resources and an ongoing commitment to ensure the long-term success of the wetland. We know from experience this requires the landowner to have a clear set of goals and objectives for the wetland and how it fits into the farm operation, the whole farm system and the catchment of which they are part.

As with any biological process, it is important to be aware of changes and interactions in the wetland and surrounding area, and where necessary, adapt our management to continue to support the restoration of the wetland. Whilst the plan is accurate as at the date on the cover, observation and regular monitoring should be included when the plan is reviewed on a 5 or 10 yearly basis.

KEY ACTIONS

At a high level, these are the priority actions for this wetland. Refer to the plan for more detail.

1. One
2. Two
3. Three
4. Four
5. Five

WETLAND RESTORATION/MANAGEMENT

SITE DETAILS

Landowner & Occupier

Primary contact

Name:

Phone:

Email:

Address:

Location

Location details:

Coordinates:

Ecological District:

Ecological Region:

Wetland dimensions

Special designation

Wetland Extent Photo

Wetland Planting Layout Photo



Plant Communities Photo



SITE DESCRIPTION

General description

Primary hydrosystem:
Primary wetland class:
Secondary wetland class:

Topography

Description:

Soils:

Current Vegetation

Description:

Special Features

Description:

Nearby Natural Areas

Description:

Wildlife

Description:

Site history

Description:

Description of water flow and drainage

Reference wetland

Current condition

Description:

ENHANCEMENT PROPOSAL — WHAT YOU PLAN TO DO

Vision

Objective(s)/steps towards the vision

Water source/management

Silting/silt management

Fencing

Weeds

TOTAL COST OF PROJECT

Funding source

LEGAL/SOCIAL ISSUES

Consent requirements (Creation of open water will generally require earthworks consents. Check with Canterbury Regional Council and your local council if any other consents will be required in connection with blocking drains, diverting water and use of herbicide. You also need permits to release live fish or any other living organism into a waterway or waterbody from the Department of Conservation, Fish & Game Council, and/or the Ministry for Primary Industries – Fisheries).

Neighbour issues

MONITORING — MEASURE YOUR SUCCESS

Monitoring methods (indicate using techniques below or alternative techniques)

Photopoints

Photopoints to be set up upon completion of the fence, to be repeated annually for the first five years.

Regeneration

The site will be mapped in detail by Environment Canterbury staff. This will provide a baseline of detailed vegetation typing that can be revisited in the future to ascertain success.

Other

A wetland condition index score will be generated while mapping the wetland. This score can be re-evaluated periodically to determine the effectiveness of the actions.

Photos / Notes

TABLE OF ACTIONS

	Value	Issue / Threat	Solution	Action	Timing	Person Responsible	Project Contribution	Farmer Contribution
1.1	Natural character							
2.0	Wetland vegetation							
2.1	Wetland vegetation							
2.2	Wetland vegetation							

2.3	Wetland vegetation							
3.0	Fauna habitat - invertebrates and lizards.							
3.1	Indigenous bird species. The site may provide habitat to mobile wetland bird species, such as pūweto (spotless crake) and koitoreko (marsh crake). The surrounding bush habitat will provide habitat for a							

	range of bush species.							
4.0	Buffering waterway							
5.0	Water quality and quantity							
6.0	All values							

7.0	All values							
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Environment Canterbury contribution	\$
SFF Project	\$
Landowner contribution	\$
Total	\$

APPENDICES

RESOURCES and REFERENCING

Link addresses may change from time to time

Wetland Restoration Handbook, Monica Peters and Beverley Clarkson, 2010

<https://www.landcareresearch.co.nz/publications/books/wetlands-handbook>

Canterbury Maps

<https://mapviewer.canterburymaps.govt.nz/>

Living Streams Handbook Part 3: Planting and Maintenance – Environment Canterbury, 2017 (updated)

Native Forest Restoration – A Practical Guide, Tim Porteous, 1993

<https://qeiiationaltrust.org.nz/publications-and-resources/guides-and-handbooks/>

Ecosourcing Code of Practice and Ethics, Chris Ferkins, Waitakere City Council, 2005 (Ecan policy to come)

Wetland Types in New Zealand – Peter Johnson and Phillipe Gerbeaux, 2004

<https://www.doc.govt.nz/documents/science-and-technical/WetlandsBW.pdf>

Environment Canterbury Biodiversity Officer

National Wetland Trust

<https://www.wetlandtrust.org.nz/>

Mana Whenua (Runānga)

Global Biodiversity Information Facility (GBIF)

Inaturalist

<https://inaturalist.nz/home>

NZPCN

<http://www.nzpcn.org.nz/>

New Zealand Birds Online

<http://nzbirdsonline.org.nz/>

Queen Elizabeth II National Trust

<https://qeiiationaltrust.org.nz/>

Canterbury Botanical Society

<http://canterburybotanicalsociety.org.nz/>

The Weed Control Handbook, Weedbusters, 2011

Weedbusters

<https://www.weedbusters.org.nz/>

