WAIORA MANUHEREKIA

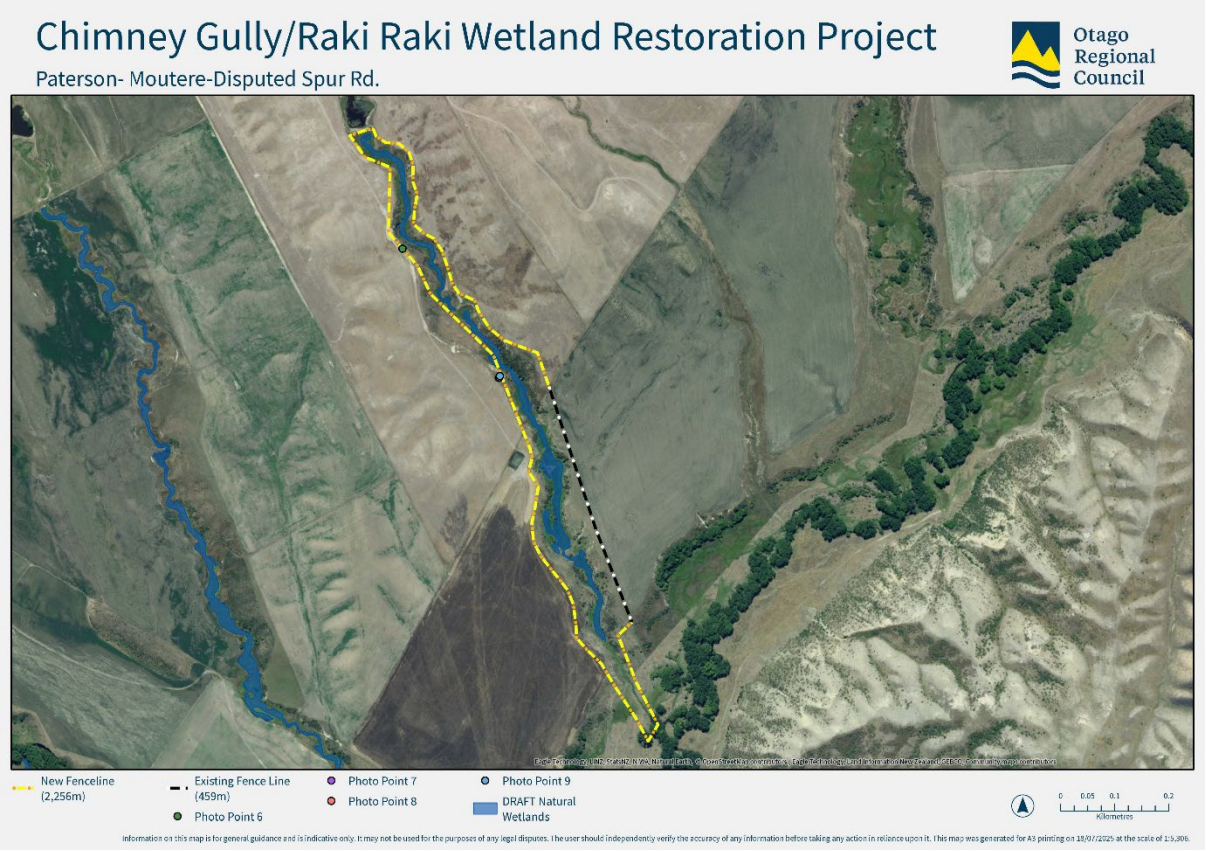
SUPPORTING OUR
Manuherekia wetland network

Chimney Gully wetland

Site Details

- **Landowner:** Andrew Paterson - Matakanui Station
- **Primary contact:** Andrew Paterson.
- **Location**
  - Coordinates: Easting 1324357, Northing 5001857
  - Ecological District: Maniototo
  - Ecological Region: Central Otago
- **Wetland dimensions:** 8.9 ha.

Site Map



**existing fence lines are indicative only*

Current wetland condition photo

Photo taken November 29th, 2024.

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Site Description

General

Primary hydrosystem: Palustrine
Secondar hydrosystem: Riverine
Primary wetland class: Marsh
Secondar wetland class: N/A
Primary wetland form: Alluvial plain
Secondary wetland form: Channel
Primary structural class: sedgeland
Secondary structural class: grassland

Topography

Soils:
Data retrieved from S-Map online, 12/02/2025.

Soil sibling: Tiro_4a.1. Shallow, silt over clay, moderately well drained. Proportion: 45.9%.
Soil sibling: Germ_2a.1. Very shallow, sand, moderately well drained. Proportion: 32.3%.
Soil sibling: Flax_105a.1. Moderately deep, silt, poorly drained. Proportion: 21.5%.
Soil sibling: Pateg_6a.1. Shallow, silt, poorly drained. Proportion: 0.2%.

Current Vegetation

The vegetation in the marsh that runs through the lower gully comprises exotic wetland grasses and indigenous sedges. The exotic grasses, blue sweet grass and creeping bent are abundant, particularly in areas with deeper water, Yorkshire fog, water forget-me-not and white clover are also common and exotic rushes (jointed rush and soft rush). Indigenous sedges, pukio, *Carex*

virgata and sharp spike sedge are common and star sedge and rautahi are occasionally present. A small number of crack willow saplings and seedlings were also observed within the marsh. Terrestrial vegetation surrounding the wetland comprises exotic herbs and pasture species and some woody vegetation. Woody vegetation is a mix of exotic and indigenous species, large elder trees and briar were abundant but have been recently sprayed. Gorse and broom have also been controlled. Indigenous trees and shrubs are also present, matagouri is common with occasional porcupine shrub. Two indigenous tree daisy species are present, *Olearia lineata* and scented tree daisy (*Olearia odorata*), both have a threat classification status of At Risk-Declining.

Special Features

This gully contains two constructed ponds that function as sediment traps.

Nearby Natural Areas

There are multiple gullies/wetlands of similar characteristic nearby. If enabled to regenerate, these will provide habitat connection for indigenous species.
Chimney gully is fed from the Dunstan mountains and Laheys Creek which hosts remnant Hall's totara (*Podocarpus laetus*), mountain toatoa (*Phyllocladus alpinus*), and Coprosma forest. These remnants are important seed sources for the catchment and are examples of pre-human forest.

Wildlife

This site possibly provides habitat for native galaxias. Monitoring should be conducted to confirm this. The native woody plants found in this site provide habitat for native bird and lizard species. A skink was noted in rank grassland at the edge of the wetland during the Wildlands site visit 27 February 2025, identification was not able to be confirmed but it was possibly a McCanns skink or tussock skink.

Site History

There is no known historical modification of this wetland, other than the construction of the ponds in recent years. This area has been extensively grazed for many years.

Description of water flow and drainage

Water in Chimney gully originates in the nearby Dunstan mountains. There are two manmade ponds within the gully that currently act as sediment traps and provide stock water.
From the Dunstan mountains, Laheys Creek is the main water source of this wetland. The wetland drains into Chatto Creek, which connects to the Manuherekia River.

Current condition

The Chimney gully wetland is currently dominated by exotic plants; both pasture grasses and woody species. There is, however, a notable element of native woody plants, including two tree daisy species with a threat status of At Risk-Declining. Native sedges and rushes are also very common within the marsh. Soil erosion is not a prominent issue, and the wetland appears to be

hydrologically functioning well.

Enhancement Proposal

Vision

To restore Chimney gully by enabling regeneration of native plant species, removing weed species and excluding stock. This restored wetland will provide habitat connectivity for mobile native species.

Objectives

Fence gully to exclude stock and eradicate woody weeds. This will allow existing native species to regenerate.

Expected Outcomes

Fencing & Planting

Fencing will prevent stock access from the gully and waterway, which in turn will better protect wetland areas and allow native vegetation to regenerate. No planting is planned for this site under the Waiora Manuherekia project. However, this site would benefit from native plantings in the future if the landowner is able.

Weed control

Removing elderflower trees, briar, gorse and broom will facilitate native plant establishment. Removal will be done by aerial spraying of herbicide.
Highly recommend doing a 'walk through' of the wetland and controlling small crack willow trees before they become more abundant and while they are still relatively small.

Sedimentation

Preventing stock from accessing the gully will reduce pugging and sediment inputs into the waterway. This will be enhanced as vegetation in the wetlands matures without grazing pressure.

Total Investment

Fencing: $18,278
Weeds: $3,444
Planting: $0
Total: $21,722

Funding source

Fencing materials & weed control – Waiora Manuherekia
Fencing installation & ongoing weed maintenance – Landowner.

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Monitoring

Annual photopoint monitoring to be used to track changes in the wetland.
Annual SHMAK monitoring can be used to track improvements in ecosystem health.