WAIORA MANUHEREKIA

SUPPORTING OUR
Manuherekia wetland network

Hills Creek South Wetland

Site Details

- **Landowner:** Jeremy Anderson
- **Primary contact:** Jeremy Anderson.
- **Location**
  - Coordinates: Spring: Easting 1355900, Northing 5015147
  - Ecological District: Maniototo
  - Ecological Region: Central Otago
- **Wetland dimensions:** 2.8 ha.

Site Map

**existing fence lines are indicative only*

Current wetland condition photo

Photo taken November 21st 2024.

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Site Description

General

Primary hydrosystem: Palustrine
Secondary hydrosystem: Riverine
Primary wetland class: Marsh
Secondary wetland class: N/A
Primary wetland form: Basin
Secondary wetland form: Floodplain
Primary structural class: Sedgeland
Secondary structural class: Grassland

Current Vegetation

The spring area is dominated by willow regrowth and elm saplings (Ulmus genus) with tussock grasses (including *Carex* sp.) providing majority of ground cover, exotic grasses including blue sweet grass, Yorkshire fog, creeping bent, marsh foxtail are dominant in areas of deeper flowing water. A large flat marsh area comprises the majority of wetland habitat present on the site. Vegetation is dominated by the indigenous sedge, rautahi with frequent sharp spike sedge. Exotic species are also present, Yorkshire fog and sweet vernal are frequent with occasional oval sedge and jointed rush. The area has recently been grazed which has made identification of some pasture species difficult. Some large willows along the riparian corridor associated with Hills Creek.

Special Features

The spring sustains the conditions for obligate wetland species directly around the seep and an extensive downstream marsh area which becomes increasingly influenced by riverine

conditions towards Hills Creek.

Nearby Natural Areas

The catchment originates from Mt Ida in the Hawkdun Ranges with the Pool Burn gorge located further downstream. These ranges and gorges support habitat for many indigenous plant species that have largely disappeared from the lowland areas.

Wildlife

The dynamic gravel beds and perennial flow of Hills Creek supports nesting habitat for a variety of birds, including Pied Oystercatchers (*Haematopus finschi*), Pied Stilts (*Himantopus leucocephalus*), Banded Dotterels (*Charadrius bicinctus*) and Black-fronted terns (*Chlidonias albostriatus*). The stream supports important habitat for native fish species, particularly the Central Otago roundhead galaxias (*Galaxias anomalus*), kōaro (*Galaxias brevipinnis*), long-fin eel (*Anguilla dieffenbachii*) and Upland bully (*Gobiomorphus breviceps*). The waterways also provided habitat for a productive brown trout sports fishery.

Site History

Before the land was developed for agriculture, it is likely that the area would have been Cool Forest and scrub (CLF13; Otago Regional Council Otago Ecosystems and Habitat Mapping). This ecosystem could have included Matai and broadleaf species.

Description of water flow and drainage

Hills Creek originates in the Hawkdun ranges and is fed by tributaries on the Idaburn Hills and surrounding plains.

Current condition

Vegetation at the site is primarily exotic, indigenous vegetation is dominant within the marsh, however, it is not particularly diverse.

Enhancement Proposal

Vision

Restored wetland ecosystem and surrounding marshes which supports diverse native flora and fauna that protects Hills Creek from poor water quality.

Objectives

Control invasive woody species (gorse, broom, willow and elm), maintain and extend stock exclusion from wetland areas, and facilitate the regeneration of native plant species.

Expected outcomes

Fencing & Planting

New fencing will prevent stock accessing a large area of marsh/riparian wetland adjacent to

Hills Creek. The establishment of natives will provide a seed source for downstream areas in the catchment and support native bird and insects. Preventing stock access from surrounding marsh areas will protect and enhance existing biodiversity values.

Weed control

In this site, a small number of crack willow and elm will require poisoning and can be left in situ dead or removed. Planting the area with natives will help limit woody weed re-growth, although they may need regular maintenance in the short term to prevent their re-establishment. Strategic plantings in the wetter marsh areas adjacent to the creek may help limit willow re-establishment and woodier species may be considered for planting where gorse is likely to establish.

Sedimentation

There is a low risk of flooding and sedimentation at this site. However, preventing stock access to the marsh area and creek banks will help reduce pugging, minimise bank erosion and reduce sediment inputs into downstream waterways.

Total Investment

Fencing: $13,991
Weeds: $1,388
Planting: $18,000
Total: $33,379

Funding source

Fencing materials, installation, planting & weed control – Waiora Manuherekia
Ongoing weed maintenance – Landowner.

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.