

TIMARU DISTRICT
SIGNIFICANT NATURAL AREAS
SURVEY

FRASER PROPERTY
WAITOHI



Report prepared for the Timaru District Council by Mike Harding
May 2011

TIMARU DISTRICT SIGNIFICANT NATURAL AREAS SURVEY

PROPERTY REPORT

PROPERTY DETAILS:

Owner: Richard Fraser
Valuation Reference: 24680/138.00
Address: Station Road, Waitohi
Location: On a terrace of the Opihi River, west of Arowhenua, Temuka
Ecological District: Low Plains
TDC Land Type: Plains
Land Environment: L1 (southern lowlands)

ECOLOGICAL CONTEXT:

The property lies within the Low Plains Ecological District on a recent terrace of the Opihi River. The original vegetation of this area would probably have been podocarp-hardwood forest, dominated by kahikatea, pokaka, cabbage tree and lowland ribbonwood. Permanently wet areas would have supported flax swamp or raupo wetland. However, as so few undisturbed sites remain in this part of Timaru District, it is difficult to determine the exact nature of the original vegetation. The indigenous fauna would probably have been more numerous and diverse, with a greater range of birds, lizards, fish and invertebrates than is presently found in the area.

Indigenous vegetation on this property comprises a small area of cabbage tree and flax dominated forest in a wetland. It is one of very few relatively intact examples of indigenous wetland vegetation in this part of Timaru District. The wetland is isolated from other areas of indigenous vegetation, though there are scattered trees of kowhai and cabbage tree nearby.

SIGNIFICANT AREAS ON THE PROPERTY:

The property was surveyed as part of the District-wide survey of Significant Natural Areas in May 2011. One wetland area alongside Station Road at the northern margin of the property is regarded as significant when assessed against the District Plan criteria. This Significant Natural Area (SNA) is illustrated on the attached aerial photograph and described in greater detail in this report. This area meets the ecological criteria in the Timaru District Plan (criteria i-vi, pages B18-B19) and is considered to be sustainable in the long term (criterion vii, page B19). SNAs are subject to confirmation by Council after regarding the matters listed under Final Considerations (pages B19-B20). It is expected that SNAs will eventually be listed in the District Plan by way of a notified plan change.

At present, consent is required from Council for clearance of areas of indigenous vegetation or habitat which meet the Interim Definitions in the District Plan. Clearance includes burning, draining, spraying with herbicides and over-planting. SNAs encompass most, but not necessarily all, areas of vegetation and habitat which meet the Interim Definitions.

To assist with the protection and management of any SNA, landowners can apply to Council for financial assistance. Any questions regarding the protection, management and use of SNAs or other areas of indigenous vegetation should be directed to the District Planner.



Fraser Property
24680/138.00

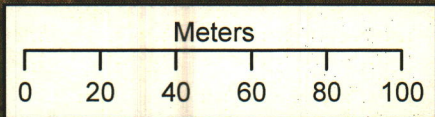
Langridge Road

Strath Road

496

Wairap Road

1:2,000



Area Name: Fraser wetland

Location (central map reference): J38: 680-602

Ecological District: Low Plains

Surveyors: Mike Harding

Property: Richard Fraser

Nearest Locality: Waitohi

Area Size (ha): 0.1

Altitude (m): 40

Survey Time: ½ hour

Survey Date: 17-05-11

General Description:

This SNA lies on a terrace of the Opihi River. It occupies a shallow swale at the northern property boundary beside Station Road.

Plant Communities:

Two main plant communities are present: cabbage tree forest and flaxland. These plant communities are described below. Naturalized (exotic) species are indicated with an asterisk*.

The forest canopy is dominated by cabbage trees. Remaining parts of the SNA are dominated by flax and pukio (*Carex secta*) in wet areas and pasture grasses in drier areas. Also present at the wetland margins are *Juncus gregiflorus*, creeping buttercup* and broad-leaved dock*. The dominant grasses are cocksfoot* and creeping bent*. Also present, but less common, are bittersweet*, blackberry*, elderberry* and pohuehue.

Notable Flora, Fauna and Habitats:

Important features of this area are that it supports wetland vegetation (a nationally-uncommon ecosystem), the vegetation canopy is dominated by indigenous species and that the wetland hydrology appears largely intact.

Notable Plant and Animal Pests:

Pasture grasses, notably cocksfoot and creeping bent, are the most important plant pests present. Blackberry is present at the wetland margins and gorse is present in nearby hedges. Animal pests were not surveyed.

Boundaries (buffering, fencing, adjoining plant communities and habitats):

This small area is securely fenced from the adjacent intensively-grazed paddock and from the road. It is isolated from other indigenous wetland vegetation, though scattered indigenous trees (cabbage tree and kowhai) are present nearby.

Condition and Management Issues:

Vegetation of this SNA is in relatively good condition. The area has been fenced for several years. The cabbage trees and flax appear healthy. The absence of woody plant pests, such as crack willow, is notable.

ASSESSMENT AGAINST DISTRICT PLAN CRITERIA:

Primary Criteria	Rank	Notes
Representativeness	M/H	The SNA is dominated by indigenous species that are representative of wetlands in this area. It supports species typical of wetlands in the Low Plains Ecological District.
Rarity	H	Lowland wetlands are a nationally-uncommon ecosystem.
Diversity and pattern	M	Plant species diversity is typical for wetlands in this area, though probably less than that originally present.
Distinctiveness/special features	M	The cabbage trees appear to be relatively old. Wetland hydrology appears largely intact.
Other Criteria		
Size/shape	M	A small wetland, with a good shape and well buffered (fenced).
Connectivity	L/M	Isolated from other areas of indigenous vegetation, though contributes towards the network of bird habitat in the area.
Long-term Sustainability	M/H	There are no immediate threats from plant or animal pests and the SNA is securely fenced.

Final Consideration (of other matters: Section D, page B-19 of Timaru District Plan):

The low-lying nature of this site limits its potential for farm development. The landowner has willingly set the area aside from farming and protected the indigenous vegetation by fencing.

Discussion:

This area meets the District Plan criteria for a Significant Natural Area. Important features of the area are that it supports wetland vegetation (a nationally-uncommon ecosystem), the vegetation canopy is dominated by indigenous species and that the wetland hydrology appears largely intact.

Scientific names of species cited by common name in this report

(Note: this is not a complete species list; it is a list only of species cited by common name in this report)

Common Name Scientific name

(* = naturalised species)

bittersweet*	<i>Solanum dulcamara</i>
blackberry*	<i>Rubus fruticosus</i>
broad-leaved dock*	<i>Rumex obtusifolius</i>
cabbage tree/ti rakau	<i>Cordyline australis</i>
cocksfoot*	<i>Dactylis glomerata</i>
crack willow*	<i>Salix fragilis</i>
creeping bent*	<i>Agrostis stolonifera</i>
creeping buttercup*	<i>Ranunculus repens</i>
elderberry*	<i>Sambucus nigra</i>
flax	<i>Phormium tenax</i>
gorse*	<i>Ulex europaeus</i>
kahikatea/white pine	<i>Dacrycarpus dacrydioides</i>
kowhai	<i>Sophora microphylla</i>
lowland ribbonwood	<i>Plagianthus regius</i>
pohuehue	<i>Muehlenbeckia australis</i>
pokaka	<i>Elaeocarpus hookerianus</i>
pukio	<i>Carex secta</i>
raupo	<i>Typha orientalis</i>