

## 5.0 INDIVIDUAL RESERVES

Recorded information on the twenty five reserves featured in this management plan has been limited due to the minimal amount of research. Therefore the reserve descriptions in this management plan should be treated as a basic summary and starting point only.

### 5.1 GRANT ROAD RESERVE (RECREATION)

#### 5.1.1 Introduction

Grant Road Reserve is a medium sized remnant that is part of a series of Otatara forest remnants. Forest composition is made up of regenerating bush, predominantly totara.

This recreation reserve is largely forested, though it does provide visitors with an open grassed area along the road frontage for picnicking and recreational activities.



Aerial of Grant Road Reserve (flown 2011)

### 5.1.2 Location and Access

Grant Road Reserve is located at 123 Grant Road, Otatara.

Pedestrian access to the reserve is off Grant Road. Visitors can park their vehicles outside the front of the reserve on the roadside. The barrier along the front of the reserve ensures visitors can only access the reserve on foot.

Within Otatara, Grant Road Reserve is bounded by residential housing. A number of these properties contain forest remnants. John Street Reserve is nearby to the east.



Location of Grant Road Reserve

### 5.1.3 History

In 1962 Lot 12 DP 4566 was vested in the Southland County Council pursuant to Section 44, Counties Amendment Act 1961, to be held as a reserve set apart for the same purposes subject to the Reserves and Domains Act 1953 (GN 183101).

In 1964 the reserve was vested in fee simple to the Southland County Council. It was to be a reserve for recreation purposes subject to the Reserves and Domains Act 1953.

In 1986 the Southland County Council decided to revoke the reservation status because the reserve was too small and because of its proximity to the John Street Playground.

The Minister of Lands revoked the reservation by NZ Gazette 1986 page 1498 (GN 129050.1) and further declared that the said land may be disposed of by the Southland County Council at current market value the proceeds of any such sale

to be paid into the Council's Reserves account such moneys to be used and applies in or towards the improvement of other reserves under the control of the Council or in or towards the purchase of other lands for reserves.

There were plans to sell the reserve land as a residential section.

Although the County Council resolved to revoke the reservation status and dispose of the land, the process was never initiated. This matter was considered by the Otatara Community Board, at its meeting on 14 August 1991. The Board also resolved that the Grant Road Reserve be disposed of with the funds, so derived, to be used for the purchase of other reserve land in Otatara, or to be used for the development of existing reserve land in the Otatara area.

The land was transferred to the Invercargill City Council by Transmission 206616.1 in 1993.

#### 5.1.4 Tenure

Classification:	<b>Recreation Reserve</b>
Legal Description:	Sections 132 and 133 Block XX Invercargill Hundred
Area:	0.3035 hectares
Certificate of Title:	SLB1/1109
Subject to:	Reserves Act 1977

#### 5.1.5 Flora

Grant Road Reserve is a medium sized discontinuous shape and part of a semi-continuous forest landscape. The front portion of Grant Road Reserve contains an open space of grass. Surrounding the grassy area is a diversity of totara-mixed podocarp forest

Future development includes restoration work and weed control to preserve the intrinsic and natural values within the reserve. It is hoped to eventually become a scenic reserve, where there will be more preservation of the reserve in the future.

Cabbage trees and flax have been incorporated around the outskirts of the grassy area. This has helped with the beautification and ongoing restoration of the area, making the reserve more attractive to visit.

Below is a list of flora known to be present in the existing forest remnant at Grant Road Reserve.



<i>*Introduced/Exotic Species</i>	
<b>Botanical Name</b>	<b>Common name</b>
<i>Aristotelia serrata</i>	Wineberry
<i>Asplenium bulbiferum</i>	Hen and chicken fern
<i>Astelia fragrans</i>	Bush Flax
* <i>Berberis darwinii</i>	Darwin's barberry
<i>Blechnum discolor</i>	Crown Fern
<i>Blechnum sp "brown scale"</i>	Common Hard Fern
<i>Coprosma lucida</i>	Shiny Karamu
<i>Coprosma propinqua</i>	Mingimingi
* <i>Cotoneaster siminsii</i>	Cotoneaster
* <i>Crateagus monogymna</i>	Hawthorn
* <i>Crocsmia x crocosmiiflora</i>	Montbretia
<i>Dacrycarpus dacrydioides</i>	Kahikatea
<i>Dacrydium cupressinum</i>	Rimu
* <i>Daphne laureola</i>	Spurge-laurel
<i>Dicksonia fibrosa</i>	Ponga
<i>Fuchsia excorticata</i>	NZ Tree Fuschia
* <i>Galeobdolon luteum</i>	Aluminium Creeper
<i>Griselinia littoralis</i>	Broadleaf
<i>Muehlenbeckia australis</i>	Pohuehue
* <i>Mycelis muralis</i>	Wall's lettuce
<i>Myrsine australis</i>	Red Mapou
<i>Phymatosorus diversifolius</i>	Hounds tongue fern/ Kowaowao
<i>Pittosporum eugenoides</i>	Lemonwood
<i>Pittosporum tenuifolium ssp colensoi</i>	Kohuhu/ Black Mapou
<i>Plagianthus regius</i>	Ribbonwood
<i>Podocarpus totara</i>	Totara
<i>Polystichum vestitum</i>	Prickly Shield Fern
<i>Pteridium esculentum</i>	Bracken
* <i>Ribes sanguineum</i>	Flowering Currant
* <i>Rubus fruticosus</i>	Blackberry
* <i>Sambucus nigra</i>	Elderberry
* <i>Senecio jacobaea</i>	Ragwort
* <i>Solanum dulcamara</i>	Bittersweet
* <i>Tropaeolum speciosum</i>	Flame flower
<i>Weinmannia racemosa</i>	Kamahi

### 5.1.6 Pest Plants

Within the reserve, there are a high number of weed species including: Blackberry, elderberry, pohuehue, bittersweet, flame flower, aluminium creeper, flowering currant, spurge-laurel, Darwin's barberry, walls lettuce, ragwort, hawthorn, montbretia and cotoneaster.

### 5.1.7 Fauna

The Otatara area supports many endemic forest birds (bellbirds (*Anthornis melanura*), tui (*Prothemadera novaeseelandiae*), fantails (*Rhipidura fuliginosa*), greywarblers (*Gerygone igata*) and silvereyes (*Zosterops lateralis*)), as well as nationally threatened species (e.g. fern bird (*Bowdleria punctata*) and wood

pigeons (*Hemiphaga novaeseelandiae*). These are likely to be present at Grant Road Reserve

### 5.1.8 Amenity Value

Grant Road Reserve is highly visible from Grant Road. It provides a substantial area of open space through an opening in the vegetation along the front. This offers visual relief for neighbouring properties and for people travelling past the reserve.



Grant Road Reserve is appreciated for its scenic value, as this remnant contributes to the significant sand dune and sand plain forest remnants of the Otatara-Sandy Point area that are considered to be nationally important.

### 5.1.9 Recreational Use

The grassed area at Grant Road Reserve becomes an open space for public use, enjoyment and recreation at any time. Due to the small size of the reserve there are no formed tracks through the forest or any other part of the reserve.

### 5.1.10 Policies

#### 5.1.10.1 Classification

While Grant Road Reserve is presently classified as Recreation Reserve, it is foreshadowed that, as a consequence of this Management Plan, application shall be made to the Minister for the area to be classified as a Scenic Reserve.

This would not inhibit public use of the reserve but would recognise the importance of the preservation of the vegetation to the local community.

#### Objectives:

- *To protect, preserve and enhance the intrinsic values of Grant Road Reserve as a forest remnant.*
- *To apply to Minister of Conservation to have Grant Road Reserve classified as a Scenic Reserve as defined in Section 19 of the Reserves Act.*

#### Policies:

5.1.10.1.1 Grant Road Reserve shall be managed as a Recreation Reserve pursuant to Section 17 of the Reserves Act 1977.

5.1.10.1.2 Council eventually aims to manage Grant Road Reserve as a Scenic Reserve pursuant to Section 19 of the Reserves Act 1977. A request will be made to the Minister to have Grant Road Reserve classified as a Scenic Reserve as defined in Section 19 of the Reserves Act 1977.

#### 5.1.10.2 Trees and Vegetation

*Policy:*

- 5.1.10.2.1 Council intends to encourage the growth of native vegetation at Grant Road Reserve. The grassed clearing will be phased out by staged re-vegetation plantings of native species.

## 5.2 JOEYS ISLAND (SCENIC)

### 5.2.1 Introduction

Joeys Island is considered to be a valuable island reserve both botanically and scenically. It is a small narrow island on a flat gravel bar within an estuarine bay. The island is located just south of the extensive Awarua Wetland area which contains unique plant communities and fauna.



Aerial of Joeys Island (Flown 2011)

## 5.2.2 Location and Access

Joeys Island is situated on the northeast arm of the Bluff Harbour between Tiwai Point and the mainland, in Awarua Bay. The island is low lying and becomes partly submerged at high tide. Pedestrian access to the island is possible at low tide from the mainland, or alternatively visitors can access the island by boat.



Location of Joeys Island

## 5.2.3 History

In about 1838 an American called John Davis arrived in Tiwai as the first European settler. Davis married a Maori and their son, Joseph, was baptised by Bishop Selwyn during his visit to Bluff in 1844.

Joseph grew up to help J T Thomson with his survey of the Oreti Estuary. At the entrance to Awarua Bay, Joey's Island is thought to be named after Joseph.

There is evidence of old camps and huts on the island, indicating there has been some human activity on the island in the past.

A Gazette Notice in 1969 registered the Bluff Borough Council to control and manage the reserve as a reserve for Scenic Purposes. In 1981 by Notice in New Zealand gazette 1981 page 2797 the reserve was classified by the Commissioner of Crown Lands as a reserve for scenic purposes.



Ownership of this reserve remains with the Crown, which has in turn appointed the Council to control and manage the reserve.

A fire which burned 1250 ha of the Awarua Wetland in late October 2005 also damaged vegetation on Joeys Island.

#### 5.2.4 Tenure

Classification:	<b>Scenic Reserve s.19 (1) (b)</b>
Legal Description:	Section 12 Block XII Campbelltown Hundred
Area:	11.4324 hectares
Certificate of Title:	Nil – pursuant to Gazette Notice 235016
Subject to:	Reserves Act 1977

#### 5.2.5 Flora

Prior to the fire in 2005, flora was considered to be a remarkable mosaic of vegetation types. The Island was well covered with native vegetation with the dominant trees being Hall's totara.

Flora can be described as coastal turf communities, containing red tussock, shrub and totara stands which are intact.

Below is a list of flora that was known to be present on Joeys Island (*Allen et al, 1989*)

\* *Introduced / exotic species*

<b>Botanical Name</b>	<b>Common Name</b>
<i>Aceana sp.</i>	Bidibidi
* <i>Agrostis tenuis</i>	Browntop
<i>Apium australe</i>	NZ Celery
<i>Blechnum capense</i>	Kiokio fern
<i>Blechnum penna-marina</i>	Alpine hard fern
* <i>Cerastium glomeratum</i>	Sticky chickweed
<i>Chionochloa rubra</i>	Red tussock
* <i>Cirsium arvense</i>	Californian thistle
<i>Colobanthus spp.</i>	
<i>Coprosma areolata</i>	Small leaved shrub
<i>Coprosma propinqua</i>	Mingimingi
<i>Cordyline australis</i>	Cabbage Tree
<i>Cyathodes fraseri</i>	shrub
<i>Cyathodes juniperina</i>	Prickly mingimingi
<i>Erechtites minima</i>	Coastal burnweed
<i>Galium propinquim</i>	mawe
<i>Gentiana saxosa</i>	Shore gentian
<i>Hebe elliptica</i>	Kokomuka
<i>Helichrysum filicaule</i>	Sub-alpine herb
<i>Hierochlce redolens</i>	Holy Grass
* <i>Holcus lanatus</i>	Yorkshire fog
<i>Hymenathera alpina</i>	Evergreen woody shrub
* <i>Hypochaeris radicata</i>	Catsear
<i>Leptocarpus simplex</i>	Jointed rush
<i>Leptospermum scoparium</i>	Manuka

* <i>Lotus corniculatus</i>	Bird's-foot- Trefoil
<i>Muelenbeckia complexa</i>	Pohuehue
<i>Myrsine australis</i>	Mapou
<i>Parsonsia heterophylla</i>	NZ Jasmine or kaihua
<i>Pernettya macrostigma</i>	Chamaephytic shrub
<i>Phormium tenax</i>	Flax
<i>Pimelea prostrata</i>	NZ Daphne
<i>Plagianthus divaricatus</i>	Shore Ribbonwood
<i>Poa laevis</i>	Silver tussock
<i>Podocarpus hallii</i>	Hall's totara
<i>Polystichum vestitum</i>	Prickly shield-fern
* <i>Prunella vulgaris</i>	Self heal
<i>Pteridium aquilinum</i>	Bracken
<i>Rubus schmidelioides</i>	Bush lawyer
* <i>Rumex acetosella</i>	Sorrel
* <i>Rumex crispus</i>	Curled dock
<i>Salicornia australis</i>	Chicken claw
* <i>Sambucus nigra</i>	Elderberry
<i>Samolus repens</i>	Creeping Brookweed
<i>Schoenus nitens</i>	Shiny bog -sedge
<i>Scirpus nodosus</i>	Sedge
* <i>Sedum acre</i>	Goldmoss Stonecrop
<i>Selliera radicans</i>	Creeping herbaceous plant
<i>Senecio biserratus</i>	Jagged fireweed
* <i>Senecio jacobaea</i>	Ragwort
<i>Senecio wairauensis</i>	Mountain fireweed
<i>Stellaria parviflora</i>	Dicot Herb
<i>Tillaea moschata</i>	Vascula Plant
* <i>Ulex europaeus</i>	Gorse

Pest plants from the list (\*) will need to be monitored and controlled to keep them from spreading.

### 5.2.6 Fauna

Very little is known of the fauna present on Joeys Island. The estuarine bay may provide a habitat for wetland species, shore birds and waders.

Bird species known to visit estuaries in the Waituna Ecological District include: Far-Eastern Curlew, Golden Plover, Caspian Tern, White-Fronted Tern, Black-Billed Gull, Grey Teal, Grey Duck, Paradise Shelduck, Canada Geese and New Zealand Dotterel. These species may also be present on Joeys Island.

In the remaining forest remnants Brown Creeper and Yellow-breasted Tit may be present.

### 5.2.7 Amenity Value

Joeys Island provides scenic amenity to the Awarua Harbour and is very important in terms of its botanical value. These values should be protected as a representation of the environment that would have existed in the past.

## **5.2.8 Recreational Use**

Due to accessibility issues, Joeys Island offers minimal recreational use.

## **5.2.9 Policy**

### **5.2.9.1 Access into and through Reserves**

Visitors have restricted access to the Island because of fluctuating tide levels. Hence, pedestrian access is only possible at low tide.

#### **Policy:**

- 5.2.9.1.1 Pedestrian access is only possible at low tide. Alternatively, visitors can access the island by boat. Priority will be given to the protection of the natural resource.



## 5.3 JOHN STREET RESERVE (RECREATION)

### 5.3.1 Introduction

John Street Reserve is a medium sized reserve that is part of a series of forest remnants in the Otatara area.

Forest composition is made up of regenerating bush, predominantly totara, and pittosporum plantings.

This recreational reserve provides visitors to the area with swings and a seesaw, and an open grassed space for picnics and recreational activities.



Aerial of John Street Reserve (flown 2011)

### 5.3.2 Location and Access

John Street Reserve is located at John Street, Otatara, approximately six kilometres south of Invercargill.

The reserve is bordered on all sides by residential properties. Several properties have forest immediately adjoining the reserve. Just beyond housing to the east,

is another remnant of forestation which is managed by Department of Conservation.

Pedestrian access to John Street Reserve is along an access strip off John Street. Access is unavailable to residents on the eastern side. An informal trail provides access to part of the Reserve.

Vehicle parking is along John Street.

The narrow street frontage makes the Reserve hidden from public view.



Location of John Street Reserve

### 5.3.3 History

The area of the Reserve was calculated under the Land Subdivision Counties Act 1946 for the total proposed subdivision and consequently the Reserve is a substantially larger size than would usually be expected in such a location.

In 1961 John Street Reserve was created by subdivision of 14 hectares of land south of Bryson Road and east of John Street. The land subdivision consequentially caused the Reserve to be set apart as a recreation reserve by A I Nicholson. 115 residential sections and a new street (John Street) were proposed but only 40 sections were eventually surveyed off. The residents of

John Street and the surrounding neighbourhood developed the reserve between 1982 and 1985.

Development included clearing the centre area and planting it in grass, controlling weeds by spraying, and fencing the boundary.

Some 1,500 native plants were planted with woodchip surrounds.

#### 5.3.4 Tenure

Classification:	<b>Recreation Reserve</b>
Legal Description:	Lot 113 DP 5968
Area:	1.2087 hectares
Certificate of Title:	169/138 (cancelled)
Subject to:	Reserves Act 1977

#### 5.3.5 Flora

John Street Reserve is made up of a grassed area in the centre of approximately 1100m<sup>2</sup> surrounded by bush of varying quality (regenerating bush remnant and plantings).

A report made for the Invercargill City Council by Bill (1999) indicates this vegetation is still predominant for the Otatara area. This report illustrated the dominant canopy species as totara forest for the area researched along John Street. At the time of research (1998-99) other main tree and shrub species included wineberry, pepperwood, lemonwood, manuka and mingimingi. The groundcover was dominated by bracken, walls lettuce and lupin.



John Street Reserve

With the Otatara climate being salt laden winds and occasional frosts, growth of plants in the area that are susceptible to these conditions can be limited. Plantation at the reserve is useful as a barrier to wind, aesthetically pleasing and attracts other native birds and insects.

Part of the list below has been referenced from John Street Recreation Reserve Draft Management Plan (Southland County Council, n.d). There are also plants that are commonly found in the Otatara area and those in a study by Bill (1999) included in the list which could be likely to also be found at John Street Reserve.

<i>* Introduced exotic species</i>	
<b>Botanical Name</b>	<b>Common Name</b>
<i>* Acer pseudoplatanus</i>	Sycamore
<i>Aristolelia serrata</i>	Wineberry
<i>Asplenium bulbiferum</i>	Hen and chicken fern
<i>Astelia fragrans</i>	Bush flax
<i>* Berberis darwinii</i>	Darwin's Barberry
<i>Blechnum capense</i>	Cape fern
<i>Blechnum discolor</i>	Crown fern
<i>Carex coriacea</i>	Cutty grass/Sedge
<i>Carpodetus serratus</i>	Marbleleaf
<i>* Cirsium vulgare</i>	Scotch Thistle
<i>Clematis paniculata</i>	Clematis/ Puawhananga
<i>* Clematis vitalba</i>	Old Man's Beard
<i>Coprosma foetidissima</i>	Stinkwood
<i>Coprosma lucida</i>	Glossy Karamu
<i>Coprosma parviflora</i>	Leafy Coprosma
<i>Coprosma propinqua</i>	Mingimingi
<i>Coprosma rotundifolia</i>	Round Leaved Coprosma
<i>Cordyline australis</i>	Cabbage tree
<i>* Cotoneaster siminsii</i>	Cotoneaster
<i>* Cytisus scoparius</i>	Broom
<i>Dacrycarpus dacrydioides</i>	White Pine/Kahikatea
<i>Dacrydium cupressinum</i>	Rimu/Red Pine
<i>Dicksonia squarrosa</i>	Tree Ferns
<i>Elaeocarpus hookerianus</i>	Pokaka
<i>Fuschia excorticata</i>	Tree Fuschia
<i>* Galeobdolon luteum</i>	Aluminium/Artillery Plant
<i>Griselina littoralis</i>	Broadleaf
<i>* Hedera helix</i>	Ivy
<i>Leptospermum scoparium</i>	Manuka
<i>* Lupinus spp.</i>	Lupin
<i>Macropiper excelsum</i>	Pepper tree or Kawakawa
<i>Microsporium diversifolius</i>	Hounds Tongue fern
<i>Moss spp.</i>	Moss
<i>Muehlenbeckia australis</i>	Pohuehue
<i>Mycelis muralis</i>	Wall Lettuce
<i>Myrsine australis</i>	Red Mapou
<i>Parsonsia heterophylla</i> and <i>P capsularis</i>	Native Jasmine
<i>Pellaea rotundifolia</i>	Button Fern
<i>Phormium colensoi</i>	Mountain Flax
<i>Pittosporum eugenioides</i>	Lemonwood
<i>Pittosporum tenuifolium</i>	Black Mapou/Kohuhu
<i>Podocarpus totara</i>	Totara
<i>Prumnopitys ferruginea</i>	Brown Pine/Miro
<i>Prumnopitys taxifolia</i>	Black Pine/Matai
<i>Pseudopanax arboreus</i>	Five finger
<i>Pseudopanax colensoi</i>	Mountain five finger
<i>Pseudopanax crassifolius</i>	Lancewood
<i>Pseudowintera colorata</i>	Pepperwood/Horopito
<i>Pteridium aquilinum</i>	Bracken fern
<i>Pteridium esculentum</i>	Bracken
<i>Rubus cissoides</i>	Bush lawyer



* <i>Rubus fruticosus</i>	Blackberry
* <i>Sambucus nigra</i>	Elderberry
<i>Schefflera digitata</i>	Seven-Finger
<i>Sophora microphylla</i>	Kowhai
* <i>Trapaeolum speciosum</i>	Flame Vine
* <i>Ulex europaeus</i>	Gorse
<i>Uncinia uncinata</i>	Hook grass
<i>Weinmannia racemosa</i>	Kamaha

#### 5.3.5.1 Pest Plants

Noxious weeds have always been a problem, as noted in historical findings from previous observations. The centre strip down the centre row separating the John Street Reserve and the Department of Conservation Reserve to the east allowed for the penetration of numerous amounts of weeds, being particularly abundant along the eastern edge.

Weeds at the Reserve include: blackberry, gorse, broom, Scotch thistle, flame vine, elderberry and Old Man's Beard. They are still currently threats to the Otatara bush, as well as cotoneaster, Darwin's barberry, sycamore, aluminium plant/artillery plant and ivy.

#### 5.3.6 **Fauna**

Historical information indicates that the wildlife resource of the Reserve was predominantly its native bird population. The native pigeon/Kereru (*Hemiphaga novaeseelandiae*), bellbird (*Anthornis melanura*), fantail (*Ripidura fuliginosa*), tui (*Prosthemandera novaeseelandiae*) and fernbird (*Bowdleria punctata*) are all known inhabitants or frequent visitors to the reserve.

Little is known regarding other fauna specifically in the reserve. However, it is likely that fauna generally found in Otatara are also found at the John Street Reserve.

#### 5.3.7 **Amenity Value**

As one of the few remaining protected bush remnants in close proximity to the Otatara urban environment, John Street Reserve offers the Otatara community a recreational and scenic resource, providing opportunities for picnicking, walking, running and use of the playground.

The medium size and close proximity to the Department of Conservation reserve to the east will ensure the likelihood of sustainability of John Street Reserve.



### 5.3.8 Recreational Use

John Street Reserve is used for outdoor recreation by local residents in and around John Street and in the Otatara community.

The grassed area becomes an open space for public use, enjoyment and recreation at any time. An informal grass trail forms a loop through the grassy clearing.

Play equipment at the Reserve includes: two sets of swings - one set of two for older children and a toddler swing beside them - as well as a seesaw. The swings and seesaw are located within the Reserve area, amongst the forestation, next to the open clearing.



### 5.3.9 Policies

#### 5.3.9.1 Classification

While John Street Reserve is presently classified as Recreation Reserve, it is foreshadowed that, as a consequence of this Management Plan, application shall be made to the Minister for the area to be classified as a Scenic Reserve.

The goal is to manage and eventually change the John Street Reserve classification to a Scenic Reserve. This would not inhibit public use of the reserve but would recognise the importance of the preservation of the vegetation to the local community.

#### Objectives:

- *To protect, preserve and enhance the intrinsic values of John Street Reserve as a forest remnant.*
- *To apply to Minister of Conservation to have John Street Reserve classified as a Scenic Reserve as defined in Section 19 of the Reserves Act.*

#### Policies:

- 5.3.9.1.1 John Street Reserve shall be managed as a Recreation Reserve pursuant to Section 17 the Reserves Act 1977.
- 5.3.9.1.2 Council eventually aims to manage John Street Reserve as a Scenic Reserve pursuant to Section 19 of the Reserves Act 1977. A request will be made to the Minister to have John Street Reserve classified as a Scenic Reserve as defined in Section 19 of the Reserves Act 1977.

### 5.3.9.2 Play Equipment

Play equipment complements the areas of open space available to children for informal play.

John Street Reserve provides natural values that are to be protected for future generations.

Play equipment cannot be viewed from John Street. It does not appear well used and offers little play value, therefore Council sees no future requirement for playground equipment at John Street Reserve.

Policy:

- 5.3.9.2.1 John Street Reserve play equipment shall be removed once it no longer meets the New Zealand Safety Standards for Playgrounds.



## 5.4 MATUA ROAD RESERVE (RECREATION)

### 5.4.1 Introduction

Matua Road Reserve is a medium sized remnant that is part of a series of forest remnants in the Otatara area. It is a small piece of forest that contributes to the larger forest composition adjoining to the south. Forest composition is made up of regenerating bush, predominantly totara.

The Reserve is made up of two blocks of bush to the north and south with a grassy strip separating them. The open grassed area provides informal recreational activities and includes a swing.

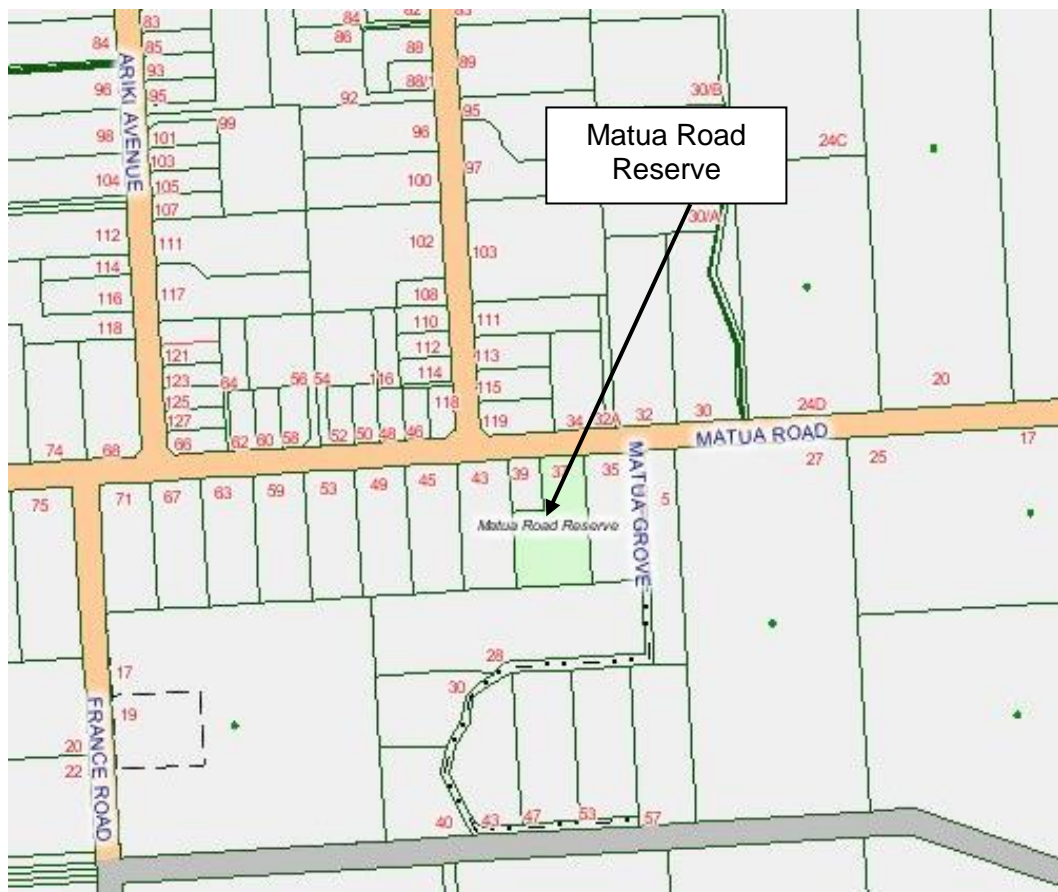


Aerial of Matua Road Reserve (flown 2011)

### 5.4.2 Location and Access

Matua Road Reserve is located at 37 Matua Road, Otatara. Residential properties surround the north, east and western parts of the reserve and vegetation continues to spread as it backs onto Matua Grove to the south.

Visitors can access Matua Road Reserve by foot along the mown grass access strip of the western boundary from Matua Road. Vehicles can be parked on the roadside.



Location of Matua Road Reserve

### 5.4.3 History

Matua Road Reserve was acquired by the Southland County Council in 1976 by Transfer 009590.1 (from James Wallace Paterson) as a reserve, subject to the Reserves and Domains Act 1953 when the area was subdivided.

In 1992, the land was declared a Recreation Reserve by NZ Gazette Notice 1992 page 1060 (GN 206785.1).

The land was transferred to the Invercargill City Council in 1993 by Transmission (GN 206616.1).

#### 5.4.4 Tenure

Classification:	<b>Recreation Reserve</b>
Legal Description:	Lot 9 DP 9157
Area:	0.5013 hectares
Certificate of Title:	SL10C/ 259
Subject to:	Reserves Act 1977 and Building Line Restriction 007152.1

#### 5.4.5 Flora

There have been no specific recordings of flora currently present at Matua Road Reserve. It is likely that, because the reserve is located within the Otatara area, the vegetation type of the reserve may also be similar.

Totara forest is noted to be the dominant canopy. Kahikatea and Matai are also present within the canopy. The under storey is made up of tree fuchsia, lemonwood and wineberry. Manuka is still present occasionally. Pohuehue is abundant in the area.



The mown area of grass between the two forest fragments provides an open space for recreational activities.

Below is a list of flora known to be present in the existing forest remnants in the Otatara area (Bill, 1999).

* <i>Introduced/exotic species</i>	<b>Botanical Name</b>	<b>Common Name</b>
*	<i>Acer pseudoplatanus</i>	Sycamore
*	<i>Aristotelia serrata</i>	Wineberry
*	<i>Berberis darwinii</i>	Darwin's Barberry
*	<i>Betula pendula</i>	Silver Birch
*	<i>Cirsium arvense</i>	Californian Thistle
*	<i>Dacrycarpus dacrydioides</i>	Kahikatea
*	<i>Eucalyptus spp.</i>	Eucalyptus
*	<i>Fuschia excorticata</i>	Tree Fuschia
*	<i>Hedera helix</i>	Ivy
*	<i>Hydrangea spp.</i>	Hydrangea
*	<i>Ilex aquifolium</i>	Holly
*	<i>Leptospermum scoparium</i>	Manuka
*	<i>Muehlenbeckia australis</i>	Pohuehue
*	<i>Mycelis muralis</i>	Wall's Lettuce
*	<i>Pinus spp.</i>	Pine
*	<i>Pittosporum eugenioides</i>	Lemonwood
*	<i>Podocarpus totara</i>	Totara
*	<i>Prumnopitys taxifolia</i>	Matai
*	<i>Rhododendrons spp.</i>	Rhododendrons
*	<i>Rubus fruticosus</i>	Blackberry
*	<i>Salix species</i>	Weeping Willow
*	<i>Sambucus nigra</i>	Elderberry

#### 5.4.5.1 Pest Plants

Even though this may not include all plants in the reserve, this list indicates that there are a lot more of introduced/exotic species than native plant species.

The key threats known to affect Otatara forest remnants are: problem plants and weeds, continued clearance and fragmentation, disturbance of normal forest processes and animal pests.

Bill noted at the time that the weeds at Matua Road Reserve included: elderberry, hydrangeas, sycamore, eucalyptus, pine, Darwin's barberry, pohuehue, wall's lettuce, silver birch, rhododendrons, holly, ivy, blackberry, willow (weeping) and Californian thistle. These are still likely to be present.

The entire fragment appeared at the time of Bill's research (1998-99) to be generally well buffered from wind and associated edge effects by the areas of forest that lay outside the boundary.

Damage to vegetation can occur due to people walking through the forested areas of the reserve making informal trails and trampling over ground cover and seedlings. This limits forest regeneration.

Natural regeneration within the reserve shall be encouraged through the control of persistent weed species and pest animals, as well as more plantings that will start out from existing bush.

#### 5.4.6 **Fauna**

Little is known of the fauna in the reserve. It is likely that fauna generally found in Otatara are also found at the Matua Road Reserve.

This includes: endemic forest birds (bellbirds (*Anthornis melanura*), tui (*Prothemadera novaeseelandiae*), fantails (*Rhipidura fuliginosa*), greywarblers (*Gerygone igata*) and silvereyes (*Zosterops lateralis*)), as well as nationally threatened species (fern bird (*Bowdleria punctata*), wood pigeons (*Hemiphaga novaeseelandiae*)).

#### 5.4.7 **Amenity Value**

Matua Road Reserve is appreciated for its scenic value, as this remnant contributes to the significant sand dune and sand plain forest remnants of the Otatara-Sandy Point area that are considered to be nationally important.

#### 5.4.8 **Recreational Use**

A single swing is the only item of play equipment in the reserve. It is not able to be seen from the road as there is little street frontage of the reserve. The swing has little play value and it receives little use. Council aims to phase it out in the future.





The grassed area currently provides an open space for public use, enjoyment and recreation at any time.

## **5.4.9 Policies**

### **5.4.9.1 Classification**

While Matua Road Reserve is presently classified as Recreation Reserve, it is foreshadowed that, as a consequence of this Management Plan, application shall be made to the Minister for the area to be classified as a Scenic Reserve.

Although Matua Road Reserve is currently classified as recreation, the main intention of the reserve has been the preservation of the native flora. This would not inhibit public use of the reserve but would recognise the importance of the preservation of the vegetation to the local community.

#### Objectives:

- *To protect, preserve and enhance the intrinsic values of Matua Road Reserve as a forest remnant.*
- *To apply to Minister of Conservation to have Matua Road Reserve classified as a Scenic Reserve as defined in Section 19 of the Reserves Act.*

#### Policies:

5.4.9.1.1 Matua Road Reserve shall be managed as a Recreation Reserve pursuant to Section 17 of the Reserves Act 1977.

5.4.9.1.2 Council eventually aims to manage Matua Road Reserve as a Scenic Reserve pursuant to Section 19 of the Reserves Act 1977. A request will be made to the Minister to have Matua Road Reserve classified as a Scenic Reserve as defined in Section 19 of the Reserves Act 1977.

### **5.4.9.2 Play Equipment**

Matua Road Reserve is currently a recreational reserve providing a site of natural values that are protected and managed for future generations.

As a reserve available for public use, it is important that the recreational facilities within Matua Road Reserve are maintained to the standard that provides for the appropriate and safe use of the reserve.

There is minimal equipment provision, it is not able to be viewed from the road and it does not appear to get a lot of use.

#### Policy:

5.4.9.2.1 Play equipment at Matua Road Reserve shall be removed once it no longer meets the New Zealand Safety Standards for Playgrounds.

### 5.4.9.3 Trees and Vegetation

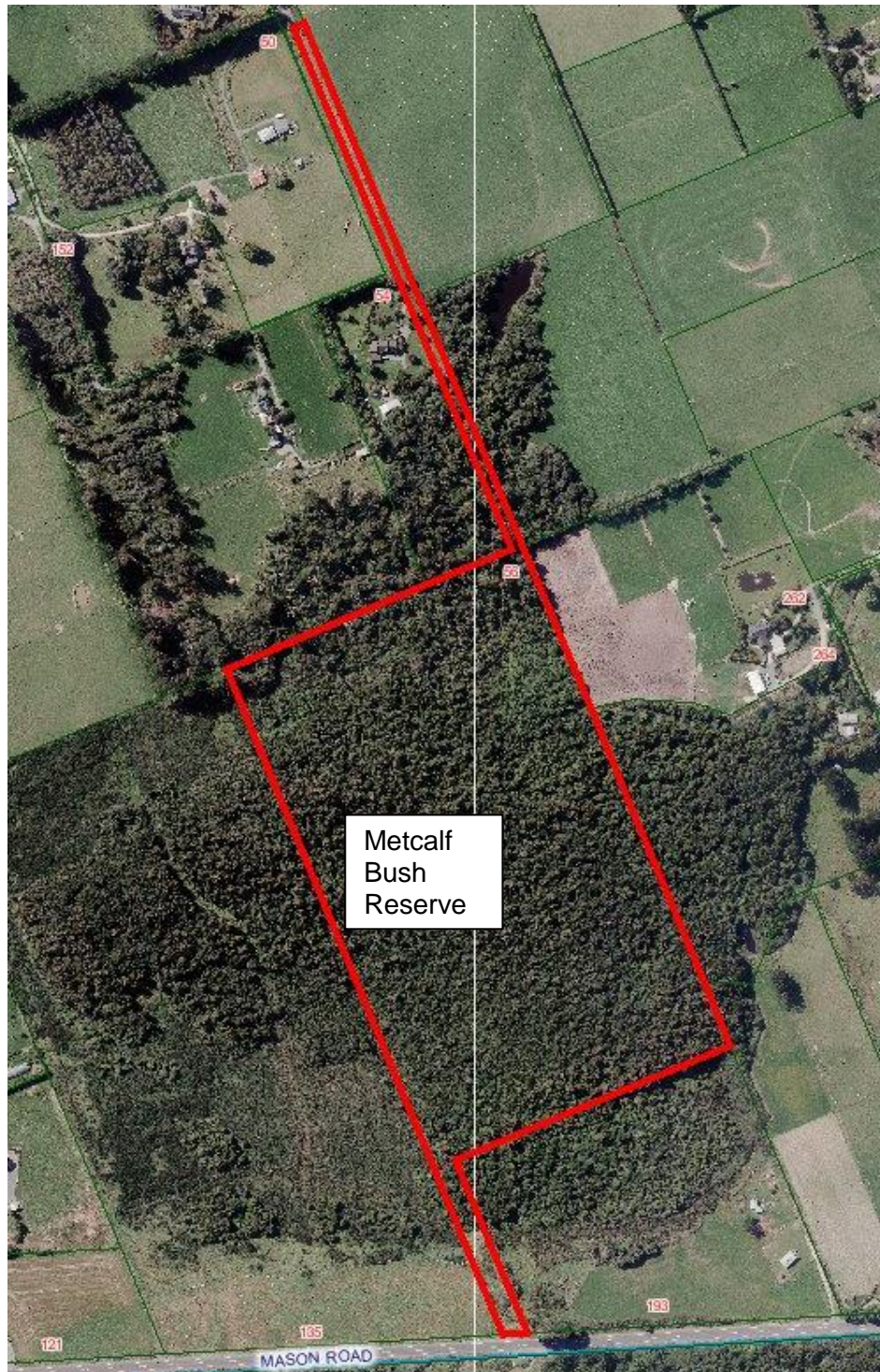
*Policy:*

- 5.4.9.3.1 The grassed clearing will eventually be phased out by staged re-vegetation plantings of native species.

## 5.5 METCALF BUSH RESERVE (SCENIC)

### 5.5.1 Introduction

Metcalf Bush Reserve is considered an important scenic and botanical bush remnant, forming one of a series of bush remnants in the area. These bush remnants provide important habitats for indigenous plants, animals and invertebrates.



Aerial of Metcalf Bush Reserve (Flown 2011).

## 5.5.2 Location and Access

Metcalf Bush Reserve is located approximately nine kilometres from the centre of Invercargill.

Seaward Bush, a large regenerating bush remnant, is located nearby to the south.

Metcalf Bush is surrounded by private property, with legal access from McKellar Road and Mason Road. There is no formed public access into Metcalf Bush.

From the south, a 20-metre wide access strip was purchased in 2001 to provide legal access from Mason Road to the Reserve. There is a deep drain across the Mason Road frontage which forms a barrier to entry.

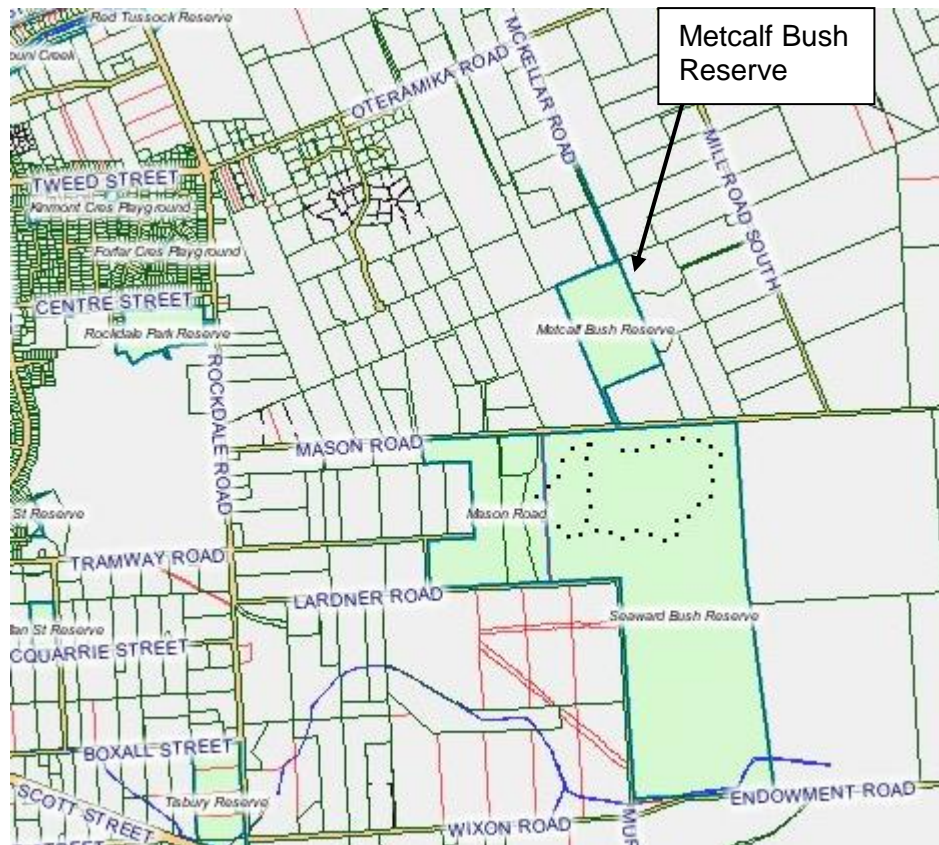
From the north, access to the reserve is via a shared chip sealed access strip with the adjoining property. It allows for legal access and street frontage from McKellar Road. Physical access is difficult.

Persistent weed species such as blackberry limit movement into and through the Reserve.

The boundary fences of Metcalf Bush are, in places, substandard. Stock is grazed on at least three of the boundaries, and in the past cattle has been grazed along the western boundary.

Fences on the east and western boundaries are generally good. However, a detailed fence inspection is required to ensure the fences are secure, particularly where stock is being grazed on neighbouring properties.

The forest along the northern boundary extends into the neighbouring land. It is difficult to determine where the Reserve boundary begins within the dense vegetation. This section of the forest is considered valuable and, while not formally protected, is not being grazed. Therefore a fence is not necessary.



Location of Metcalf Bush Reserve

### 5.5.3 History

The Invercargill City Council, with assistance from the Queen Elizabeth II National Trust, purchased Metcalf Bush in 1992 from the McKellar's.

A QEII National Trust covenant was already in place at the time, and this was transferred to the new owners. Lots 1 DP 302275 and 2 DP 10558 are now in the name of the Invercargill City Council.

Mable Grove is an early name for the area and this pre-dates the more commonly known McKellar Bush name. The bush was renamed Metcalf Bush after the former Parks Manager, Lawrie Metcalf, who was responsible for the overall management of Parks and Recreation from 1977 until his retirement in 1992.

At the time of purchase Council noted its intention to protect the land as a reserve under the Reserves Act 1977.

In 1999, a narrow strip of land running parallel to McKellar Road was disposed of, following the QEII Covenant being lifted from the title. The land was considered surplus to Council's requirements and not necessary to gain access to Metcalf Bush Reserve. This was done with the condition that the covenant remains on the Metcalf Bush proper (Lot 2 DP 10558).

In 2001, an agreement was reached between Council and the owner of 193 Mason Road to purchase a 20-metre strip of land on the western boundary

for a price of \$3,500.00. Council covered the survey and legal costs. This land became Lot 1 DP 302275 and is 0.3220 hectares, following a Council resolution in 1996 to designate 193 Mason Road (the land between Metcalf Bush and Seaward Bush) for reserve purposes.

The purpose of the designation was to enable the development of a pedestrian link between Seaward Bush Reserve and Metcalf Bush.

The land located between these two reserves contains an area of indigenous vegetation. This request was included in the Proposed District Plan when it was publicly notified on 31 January 2000.

After discussions with the new owner of the land it was agreed that Council would purchase a portion of the land. Council agreed to reduce the size of the designation to reflect the area of land to be purchased.

In 2003 the land forming Metcalf Bush proper, plus the recently purchased access land off Mason Road, were declared Scenic Reserve by Gazette Notice 2003 page 2228.

#### 5.5.4 Tenure

Classification:	<b>Scenic Reserve/QEII Trust Covenant</b>
Legal Description:	Lot 2 DP 10558, Lot 1 DP 302275
Area:	14.1890 hectares
Certificate of Title:	SL6C/290, 8925
Subject to:	Reserves Act 1977 Rights of Way (Easement Certificate 081148.1), Agreement 085612.1., Queen Elizabeth II Open Space Covenant 201549.2., Reserves Act 1977.

#### 5.5.5 Flora

This podocarp/broadleaved lowland forest on alluvial flats is made up of mainly kamahi and matai in the canopy tier. Also present is totara, as well as rimu and kahikatea emergents.

The middle tier includes wineberry, tree fuchsia, *Dicksonia fibrosa*, round leaved coprosma and pepperwood. Sycamore and holly are also notably present in this middle tier.

Ground Cover includes *Hypolepis tenuifolia*, crown fern and hounds tongue fern.

The areas of bush that lie outside of the reserve boundary provide a valuable buffer to the Reserve.

Below is a list of flora known to be present in Metcalf Bush - (Cuddihy, 1981)	
* Introduced exotic species.	
Botanical Name	Common Name
* <i>Acer Pseudoplatanus</i>	Sycamore
<i>Asplenium falcatum</i>	Drooping spleenwort
<i>Astelia spp.</i>	Perching lily
<i>Blechnum capense</i>	Native fern
<i>Blechnum discolor</i>	Crown fern or Piupiu

	<i>Carex sp.</i>	Cutty grass / sedges
	<i>Coprosma areolata</i>	Small leaved shrub
	<i>Coprosma foetidissima</i>	Stinkwood
	<i>Coprosma lucida</i>	Glossy karamu
	<i>Coprosma parviflora</i>	Small leaved shrub
*	<i>Cytisus scoparius</i>	Broom
	<i>Dacrycarpus dacrydioides</i>	Kahikatea
	<i>Dacrydium cupressinum</i>	Red Pine or Rimu
	<i>Elaeocarpus hookerianus</i>	Pokaka
*	<i>Eucalyptus spp.</i>	Eucalyptus
	<i>Gleichenia dicarpa</i>	Swamp umbrella fern
*	Grasses	English Grasses
	<i>Griselinia littoralis</i>	Broadleaf or Kapuka
	<i>Histiopteris incisa</i>	Waterfern
*	<i>Ilex aquifolium</i>	Holly
	<i>Juncus spp.</i>	Rush
	<i>Leptospermum scoparium</i>	Tea tree or Manuka
	<i>Melicytus lanceolatus</i>	Mahoewao
	<i>Myrsine divaricata</i>	Weeping matipo
	<i>Neomyrtus pedunculata</i>	Native shrub
	<i>Phyllocladus alpinus</i>	Mountain toa toa
	<i>Phymatosorus diversifolius</i>	Hounds tongue fern or Kowaowao
	<i>Pittosporum eugenioides</i>	Lemonwood or tarata
	<i>Podocarpus ferrugineus</i>	Miro
	<i>Podocarpus hallii</i>	Hall's totara
	<i>Pseudopanax colensoi</i>	Three finger
	<i>Rubus australis</i>	Bush lawyer
*	<i>Rubus fruticosus</i>	Blackberry
*	<i>Ulex europeaus</i>	Gorse
	<i>Uncinia uncinata</i>	Hook grass
	<i>Weinmannia racemosa</i>	Kamaha

In combination with the surrounding bush, including the nearby Seaward Bush, Metcalf Bush is of considerable significance on the Southland Plains.

Protection of the privately owned forest would improve both its viability and that of Metcalf Bush. It would be an advantage if the management philosophy and practice of Seaward Bush, Metcalf Bush and the surrounding privately owned bush were complimentary.

#### 5.5.5.1 Pest Plants

The main threat to this area is that of invasive weeds. There is extensive kamahi dieback as a result of the 1996 frosts and, where the subsequent light gaps have been created, sycamore seedlings are abundant.

Other problem plants include: gorse, broom, cotoneaster, blackberry, holly, elderberry, barberry, bittersweet and both Scotch and Californian thistles.

A vegetation report prepared in 1981 by the New Zealand Forest Service for the Queen Elizabeth II National Trust noted at that time, that the bush was made up of approximately 55% pole rimu, 30% manuka scrub, 13% scrub and 2% broom.

The manuka scrub and scrub areas were most likely to have been developed from cutover podocarp forest that had been burnt.

### **5.5.6 Fauna**

There is no known information on the fauna found in Metcalf Bush. It is likely that the birds, invertebrates, mammals, amphibians and reptiles found here would be similar to that which is located at the neighbouring Seaward Bush.

### **5.5.7 Amenity Value**

Metcalf Bush holds real value to the residents of Invercargill as one of the few remaining natural bush areas in close proximity to the City's urban environment.

As an extension to Seaward Bush, this Reserve provides a valuable area of native bush remnant allowing a protected habitat for native plants, birds and invertebrates.

While the Reserve currently offers no recreational value to the community, long term potential of the Reserve includes opportunities for walking and nature watching.

To local residents, it offers visual freedom from the confines of city living.

### **5.5.8 Recreational Use**

With no formed public access into Metcalf Bush, there are currently very little recreational opportunities for the community.

Council recognises the importance these bush remnants have for the community, providing both a recreational resource for walking or running and as an educational 'classroom'.

A long-term goal is to allow the public access into the Reserve with the construction of a walking track and associated amenities. However, this will only occur if and when resources become available and there is a demand for further walking tracks in the area.

Should there be a development of extended tracks, this would create a link with the existing walking tracks in Seaward Bush.

### **5.5.9 Present Management**

Metcalf Bush has a Queen Elizabeth II National Trust Covenant registered on the title for the purposes of protecting the natural and open space values and the flora and fauna. Consultation and agreement between Council and the QEII Trust representative is required when considering management issues.

### **5.5.10 Policies**

#### **5.5.10.1 Administration**

Metcalf Bush has been recognised as a significant forest remnant in the Invercargill area. Classification as a Scenic Reserve under the Reserves Act



1977 ensures a high level of protection for the future. Metcalf Bush also contains a QEII National Trust Covenant. The Queen Elizabeth II National Trust Covenant agreement highlights the following goals:

Policy:

5.5.10.1.1 Metcalf Bush shall be managed according to the First Schedule of the QE II Covenant agreement. Metcalf Bush shall be managed for the following purposes:

- (a) To protect and maintain open space values of the land.
- (b) To protect native flora and fauna on the land.
- (c) To facilitate the use of the land for recreational and educational purposes.

5.5.10.2 Access Into and Through Reserves

The public currently has no access into Metcalf Bush except with authorisation from the Parks Manager.

Management focuses on the preservation and enhancement of the ecological values of the reserve. This is considered to be an adequate level of management in the interim.

A foreshadowed goal would ideally permit the public access into the reserve. This would require a significant amount of resources, with the construction of a bridge, walking tracks, signage and interpretational signage.

Public access will only be developed if and when resources permit and the demand arises. The goal of minimum human intervention is favoured.

Policy:

5.5.10.2.1 The foreshadowed goal in the distant future for Metcalf Bush is to provide the necessary facilities to allow the public safe access into the reserve.



## 5.6 OMAUI RESERVE (RECREATION)

### 5.6.1 Introduction

Omaui Reserve is of historical significance to the Omaui area ever since it became the first gateway to Invercargill. Omaui township was originally occupied as a settlement by Maori and European visitors as a base for flax and whaling.

Omaui Reserve complements the adjacent Omaui Scenic Reserve (Department of Conservation) that is considered significant as one of the last stands of this type of forest remaining in the Invercargill area.

Omaui Reserve provides visitors to the area with a sheltered picnic area, a walking track and an elevated viewing platform, amongst a regenerating podocarp/broadleaf coastal forest.



Aerial of Omaui Reserve (Flown 2011)

### **5.6.2 Location and Access**

Omaui Reserve is located approximately 20 kilometres by road from Invercargill on the outskirts of the Omaui settlement.

The reserve is bounded on the east and western sides by farmland and to the south by Omaui Scenic Reserve (managed by Department of Conservation). Mokomoko Road and the New River Estuary form the northern boundary.

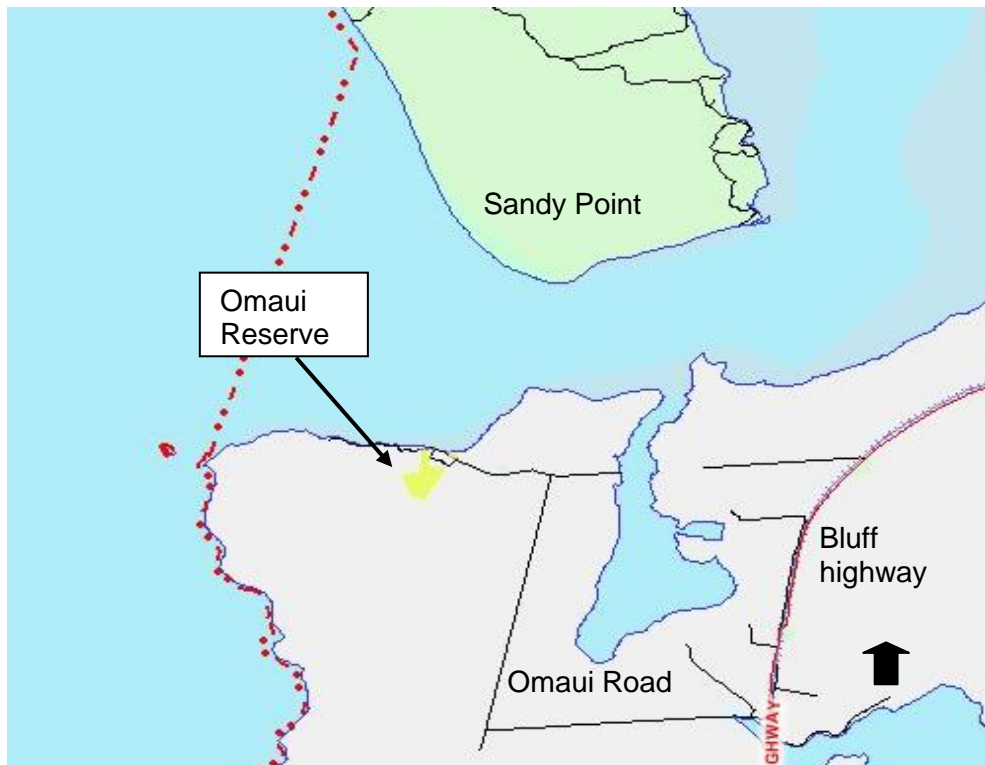
A small triangular portion of the Reserve (approximately 0.5 ha) is located north east of the main reserve. They are separated by residential properties, Mokomoko Road and Whalers Crescent. This portion of the Reserve is bounded by Mokomoko Road to the south, farmland to the east and the New River Estuary to the north.

Mokomoko Road provides the only formed access into Omaui Reserve. The car park, picnic area and start of a walking track all adjoin this road. Vehicles are not permitted into the picnic area and a barrier is used to restrict access to only those vehicles used for maintenance and emergencies.

Neighbouring land to the south is managed by Department of Conservation. It has a legal access strip that runs the entire length of the south-eastern boundary of Omaui Reserve. This access strip is fenced within Omaui Reserve (Invercargill City Council) and is therefore indistinguishable from the rest of the Reserve.

There is no formal access to the northern portion of the Reserve that is separated off from the Reserve proper.

The adjoining landowner, who has land either side of Omaui Reserve, gains access through the Reserve to move stock between farms. This arrangement has been informal in the past and needs to be formalised through the management plan process.



Location of Omaui Reserve

### 5.6.3 History

The township of Omaui was originally a small Maori fishing village and is an important location in Maori tradition. This village was visited by early settlers in search of flax and became a whaling station site for a brief period in the early 19<sup>th</sup> Century.



View from the Omaui Reserve Lookout Platform (ICC)

Ngai Tahu ki Murihiku recognise Omaui as one of their most important sites in Southland. Omaui was named after their ancestor Maui Tikitiki. The villages were surrounded by forests and wetlands where trees, birds, flax, medicines and stone resources were gathered.

Omaui is in a very strategic location, allowing iwi access to many resources of the region. Resources included mahinga kai (foods) such as flounder, cockles, fish, paua and the famous toheroa.

The Oreti River was a main trail to the hinterland.

A large holding of land in the Omaui area was acquired by the Invercargill City Council as a consequence of the Reserves and Other Lands Disposal Act 1955.

Section 22 authorised the abolition of the New River Harbour Board and vested certain land, the property of that Board, in the Corporation of the City of Invercargill. That land totalled 1029 acres 1 rood 31.1 perches.

From 1955 much of the original land was sold off. All that remains in Invercargill City Council management is the area known and managed as the Omaui Reserve.

The land was vested in the Corporation upon trust as an endowment for municipal purposes, subject to the provisions of the Municipal Corporations Act 1954.

Part of the area was developed for holiday homes during the 1950's and was eventually surveyed off and made freehold property after it was subdivided in 1982.

Archaeological sites, including unrecorded pre-1900 sites, are protected against any disturbance or removal under section 99 of the Historic Places Act 1993. Permission of the New Zealand Historic Places Trust is required before they can be modified or destroyed.

Archaeological and oral traditions suggest Maori have had a long association with Omaui since their earliest arrivals.

A midden/oven site exists near the northern boundary of Omaui Reserve. The site is visible in beach scarp opposite Omaui reserve, with the eastern end opposite Whalers Crescent turnoff, close to the small triangular portion of Omaui Reserve.

It extends along 60m of eroding (now stabilised by rocks) sea shore and it is not known how far inland it extends (*sourced from New Zealand Archaeological Association records January 11, 2011*). This site adds to the importance of the historical nature of Omaui.



Midden/Oven site (New Zealand Archaeological Association)

Maori Urupa or cemeteries are also known to exist in the Omaui area.

In 2003, by Gazette notice 2003 page 797, the land was declared as a Recreation Reserve subject to the Reserves Act 1977 together with a right of way over lot 1 DP 6274, appurtenant to the said Lot 2, created by deed of easement 241/26. As part of this management planning process, Council resolved that Scenic Reserve status was more in line with the level of protection required for this Reserve.

Department of Conservation did not allow this change to be made due to access issues. Council still aims to manage Omaui Reserve as, and eventually change its classification to, a Scenic Reserve.

Council is currently negotiating an easement arrangement with the neighbouring landowner that will allow stock movement and public access along a grassy lane through the Omaui Reserve near the southern boundary.

Fencing in this area and along the boundary with adjacent Conservation land should be monitored and upgraded to ensure that stock cannot escape into either Omaui Reserve or neighbouring Conservation land.

#### 5.6.4 Tenure

Classification	<b>Recreation Reserve</b>
Legal Description:	Pt Lot 2 DP 6780
Area:	14.2730 hectares
Certificate of Title:	SL7C/868
Subject to:	Reserves Act 1977 Right of Way created by Deeds of Easement over Part Lot 1 DP 6274 (CT 241/26).

#### 5.6.5 Flora

The area was originally covered in coastal bush of a similar nature to the remnants that remain in the area. Vegetation was completely cleared in the early days and used initially for grazing.

Regeneration growth in the early 1950's was mainly of manuka which was harvested for firewood in the mid 1960's. Over the past 20 years the area has started to regenerate and now has a diversity of species.



Omaui Reserve is an important continuation of the coastal ecosystem in the area. The vegetation within the reserve is sensitive to change and has been heavily impacted on by climatic events and human intervention.

Omaui Reserve is presently in a stage of natural regeneration and succession, following successive and significant human impact on the forest structure.

It would be an advantage if the management philosophy and practice of Omaui Reserve and Omaui Scenic Reserve were complimentary.

Below is a list of flora known to be present in Omaui Reserve from both the survey and recent observations

\* *Introduced / exotic species*

<b>Botanical Name</b>	<b>Common Name</b>
<i>Aristotelia serrata</i>	Wineberry or Mako
<i>Asplenium bulbiferum</i>	Hen and chicken fern or mauku
<i>Asplenium flaccidum</i>	Hanging spleenwort or Raukatauri
<i>Asplenium lyalli</i>	Lyll's Spleenwort
<i>Astelia fragrans</i>	Bush Lily or Kakaha
* <i>Berberis darwinii</i>	Darwin's barberry
<i>Blechnum discolour</i>	Crown fern or Piupiu
<i>Blechnum fluviatile</i>	Kiwa kiwa
<i>Blechnum minus</i>	Swamp kiokio
<i>Blechnum sp. 'brownscale'</i>	Common hard fern
<i>Carpodetus serratus</i>	Marbleleaf or Putaputaweta
* <i>Cirsium vulgare</i>	Scotch thistle
* <i>Convolvulus</i>	Field bindweed
<i>Coprosma lucida</i>	Glossy karamu
<i>Coprosma spp.</i>	
<i>Cordyline australis</i>	Cabbage tree or Ti
* <i>Crocoshmia x crocosmiiflora</i>	Montbretia
<i>Cupressocyparis leylandii</i>	Leylandii
<i>Dacrydium cupressinum</i>	Red Pine or Rimu
<i>Dicksonia squarrosa</i>	Tree fern or Wheki
<i>Fuchsia excorticata</i>	Tree fuchsia or Kotukutuku
<i>Griselinia littoralis</i>	Broadleaf or Kapuka
<i>Hebe salicifolia</i>	Koromiko
<i>Hypolepis distans</i>	Scrambling ground-fern
<i>Hypolepis tenuifolia</i>	Pressed fern
<i>Leptospermum scoparium</i>	Tea tree or Manuka
* <i>Lupinus spp.</i>	Lupin
<i>Melicytus ramiflorus</i>	Whiteywood or Mahoe-wao
<i>Metrosideros diffusa</i>	Climbing rata or Akatea
<i>Metrosideros umbellata</i>	Ironwood or (Southern) Rata
<i>Muehlenbeckia australis</i>	Pohuehue
<i>Myrsine australis</i>	Red Mapou or Matipou
<i>Olearia colensoi</i>	Leatherwood or Tupare
<i>Parsonsia capularis</i>	Native Jasmine or Akakiore
* <i>Pasture grass spp</i>	
<i>Phormium tenax</i>	Flax or Harakeke
<i>Phymatosorus diversifolius</i>	Hounds tongue fern or Kowaowao
<i>Pittosporum spp.</i>	
<i>Polystichum vestitum</i>	Prickly shield fern or Puniu
<i>Prumnopitys ferruginea</i>	Miro
<i>Prumnopitys taxifolia</i>	Black Pine or Matai



<i>Pseudopanax crassifolius</i>	Lancewood or Horoeka
<i>Pseudopanax simplex</i>	Evergreen plant
<i>Pseudopanax sp. aff. Colensoi</i>	Fivefinger or Orihou
<i>Pteridium esculentum</i>	Bracken or Rarauhe
<i>Ripogonum scandens</i>	Supplejack or Kareao
<i>Rubus cissoids</i>	Bush lawyer Tataramoa
* <i>Rubus fruticosus</i>	Blackberry
* <i>Sambucus nigra</i>	Elderberry
<i>Schefflera digitata</i>	Seven finger or Pate
<i>Solanum laciniatum</i>	Poroporo
* <i>Tropaeolum speciosum</i>	Chilean flame flower
'Tussock' spp	
* <i>Ulex europaeus</i>	Gorse
<i>Uncinia uncinata</i>	Hook grass
<i>Weinmannia racemosa</i>	Kamahi

Native vegetation along the northern boundary extends into the neighbouring residential properties in places. This section of the boundary is not fenced and as a result there has been some confusion in the past as to where the boundary line lies.

A survey was done in 1999 to define this boundary line. While it is unnecessary to have a fence constructed along this boundary, it is important that neighbouring residents do not encroach into the reserve, particularly by planting exotic species that could become problematic weed species in the future.

#### 5.6.5.1 Pest Plants

One of the greatest threats to the ecological values of Omaui Reserve is that of invasive weed species.

Omaui Reserve has large areas of gorse, especially along its western boundary. While gorse acts as a nursery for native seedlings and assists in natural regeneration, it is also acting as a nursery crop for invasive pest species such as Chilean flame creeper and blackberry that are becoming well established within Omaui Reserve.

Large scale spraying of gorse was carried out in 2003/2004 and this is evident by large areas of standing dead gorse plants.

Community members have indicated an interest in working alongside Council for restoration work.

#### 5.6.6 **Fauna**

Below is a list of fauna known to be present in Omaui Reserve	
<b>Scientific Name</b>	<b>Common Name</b>
<u>Avifauna</u>	
<i>Anthornis malaneura</i>	Bellbird or Korimako
<i>Carduelis carduelis</i>	Goldfinch
<i>Carduelis flammea</i>	Redpoll
<i>Chrysosomus lucidus</i>	Shining Cuckoo or Pipiwharauoa
<i>Circus approximans gouldi</i>	Australasian Harrier Hawk or Kahu

<i>Emberiza citronella</i>	Yellowhammer
<i>Finschia novaeseelandiae</i>	Brown Creeper or Pipipi
<i>Fringilla coelebs</i>	Chaffinch
<i>Gerygone igata</i>	Grey Warbler or Riroriro
<i>Gymnorhina tibicen</i>	Magpie
<i>Hemiphaga novaeseelandiae</i>	New Zealand Wood Pigeon or Kereru
<i>Ninox novaeseelandiae</i>	Morepork or Ruru
<i>Passer domesticus</i>	Sparrow
<i>Petroica macrocephala</i>	Tomtit or Miromiro
<i>Prothemadera novaeseelandiae</i>	Parson's bird or Tui
<i>Rhipidura fuliginosa</i>	Fantail or Piwakawaka
<i>Sturnus vulgaris</i>	Starling
<i>Todirhamphus sanctus</i>	Kingfisher or Kotare
<i>Turdus merula</i>	Blackbird
<i>Turdus philomelos</i>	Song thrush
<i>Zosterops lateralis</i>	Silvereye or Tauhou
<u>Vertebrates and Invertebrates</u>	
<i>Apocrita (suborder)</i>	Wasps
<i>Bombus sp</i>	Bumblebees
<i>Chilopoda</i>	Centipedes
<i>Cicadidae sp</i>	Cicadas
<i>Clitarchus hookeri</i>	Stick insects – green and brown
<i>Diplopoda</i>	Millipedes
<i>Orthoclydon praefactata</i>	Flax-Looper Caterpillar
<i>Orthoptera</i>	Wetas
<i>Prionoplus reticularis</i>	Huhu beetles
<i>Pulmonata</i>	Snails
<i>Ranidae family</i>	Tree frogs
<u>Mammals</u>	
<i>Bos primigenius</i>	Cattle
<i>Felis catus</i>	Feral cats
<i>Mus musculus</i>	Mice
<i>Mustela furo</i>	Ferrets
<i>Oryctolagus cuniculus</i>	Rabbits
<i>Ovis aries</i>	Feral sheep
<i>Rattus</i>	Rats
<i>Trichosorus vulpecula</i>	Brush tailed possum

### 5.6.7 Amenity Value

Omaui Reserve has a high amenity value as a naturally regenerating coastal podocarp/broadleaf forest that has been heavily impacted on in the past by humans. It provides recreational opportunities for residents and visitors to Omaui.

There is a historical link with the Omaui area and nearby archaeological sites that have high significance for Maori tradition and are a reminder of European whaling.

### 5.6.8 Recreational Use

Omaui Reserve provides visitors to the area with a sheltered picnic area, a walking track and an elevated viewing platform amongst a regenerating podocarp/ broadleaf coastal forest.



A relatively new track, developed in 2002/2003, leads visitors to a high point within the Reserve where a platform has been constructed. From this platform panoramic views of the surrounding coastline and mountains in the distance can be seen.

A self contained toilet was constructed at the entrance to the Reserve in early 2004.

In April 2004 Council organised the Omaui Coastal Walk - a guided walk for members of the public to experience the Omaui coast, bush and views.

Beginning at Omaui Reserve, the walkers went through the Department of Conservation's Omaui Scenic Reserve to a lookout where they were able to get 360° views of the surrounding area. The walkers returned to Omaui Reserve via the rugged coastline and farmland.

The Bluff Community Board developed a concept strategy for the Omaui Township. Part of the 2010 Omaui Concept Plan illustrates what future development the Bluff community would like to see happen with Omaui Reserve.



Aerial photograph showing walking track and lookout point in Omaui Reserve

The community would like to see a way of commemorating the ship wreck of the Guiding Star. Restoration of vegetation is also included in the plan. Council will consider these ideas in any future planning.

The existing walking track at Omaui Reserve has the potential for future development by extending the walking track into Omaui Scenic Reserve. Any proposal would be developed in conjunction with Department of Conservation who manage that land.

Interpretive signage, along with a sculpture or monument, at the small isolated triangular section of Omaui Reserve would be a way of acknowledging the historical Guiding Star wreck. This would provide an opportunity for visitors and the community to learn of early local maritime history.

All potential future developments will be subject to the availability of funding and the provision for any ongoing maintenance of any new assets.

## **5.6.9 Policies**

### **5.6.9.1 Classification**

While Omaui Reserve is presently classified as Recreation Reserve, it is foreshadowed that, as a consequence of this Management Plan, application shall be made to the Minister for the area to be classified as a Scenic Reserve.

This would not inhibit public use of the reserve but would recognise the importance of the preservation of the vegetation to the local community.

#### Objectives:

- *To protect, preserve and enhance the intrinsic values of Omaui Reserve as a forest remnant.*
- *To apply to Minister of Conservation to have Omaui Reserve classified as a Scenic Reserve as defined in Section 19 of the Reserves Act.*

#### Policies:

5.6.9.1.1 Omaui Reserve shall be managed as a Recreation Reserve pursuant to Section 17 of the Reserves Act 1977.

5.6.9.1.2 Council aims to manage Omaui Reserve as a Scenic Reserve pursuant to Section 19 of the Reserves Act 1977. A request will be made to the Minister to have Omaui Reserve classified as a Scenic Reserve as defined in Section 19 of the Reserves Act 1977.

### **5.6.9.2 Administration**

The Department of Conservation manages a larger area of conservation land that adjoins to the south of Omaui Reserve. Management objectives for Omaui Reserve should complement the management objectives for the neighbouring conservation land.

The Bluff Community Board and Omaui Steering Committee advise Council on the particular needs of their community including the Omaui Township. This board therefore has an interest in the management of Omaui Reserve and should be advised of any major changes or developments.

#### Policies:

5.6.9.2.1 Ongoing consultation will continue with the Department of Conservation on management objectives, such as the extension of a walking track into Omaui Scenic Reserve.

5.6.9.2.2 Consultation with the Bluff Community Board and Omaui Steering Committee will continue regarding their concept plan and any future developments of Omaui Reserve.

5.6.9.3 Occupation Agreements

*Policy:*

5.6.9.3.1 To continue consultation with adjoining land owners to come to a solution for legal easement and encroachments on Omaui Reserve. Consultation will include a formal agreement for linking access to (DOC) Omaui Scenic Reserve.

5.6.9.4 Signage

*Policy:*

5.6.9.4.1 To consider interpretation signage for 'The Guiding Star' at the small triangular section of Omaui Reserve.

5.6.9.5 Buildings and Structures

*Policy:*

5.6.9.5.1 To consider a monument for 'The Guiding Star' at the small triangular section of Omaui Reserve.

5.6.9.6 Dogs on Reserves

*Policy:*

5.6.9.6.1 Omaui Reserve is a "Dogs on Lead Area" as defined by the Dog Control Policy. This means that dogs must be on a lead and under control at all times. See Policy 4.8 - Dogs on Reserves.



## 5.7 PARNELL SANCTUARY RESERVE (SCENIC)

### 5.7.1 Introduction

Parnell Sanctuary Reserve is a relatively small bush reserve, part of a series of forest remnants in the Otatara area



Aerial of Parnell Sanctuary Reserve (Flown 2011)

### 5.7.2 Location and Access

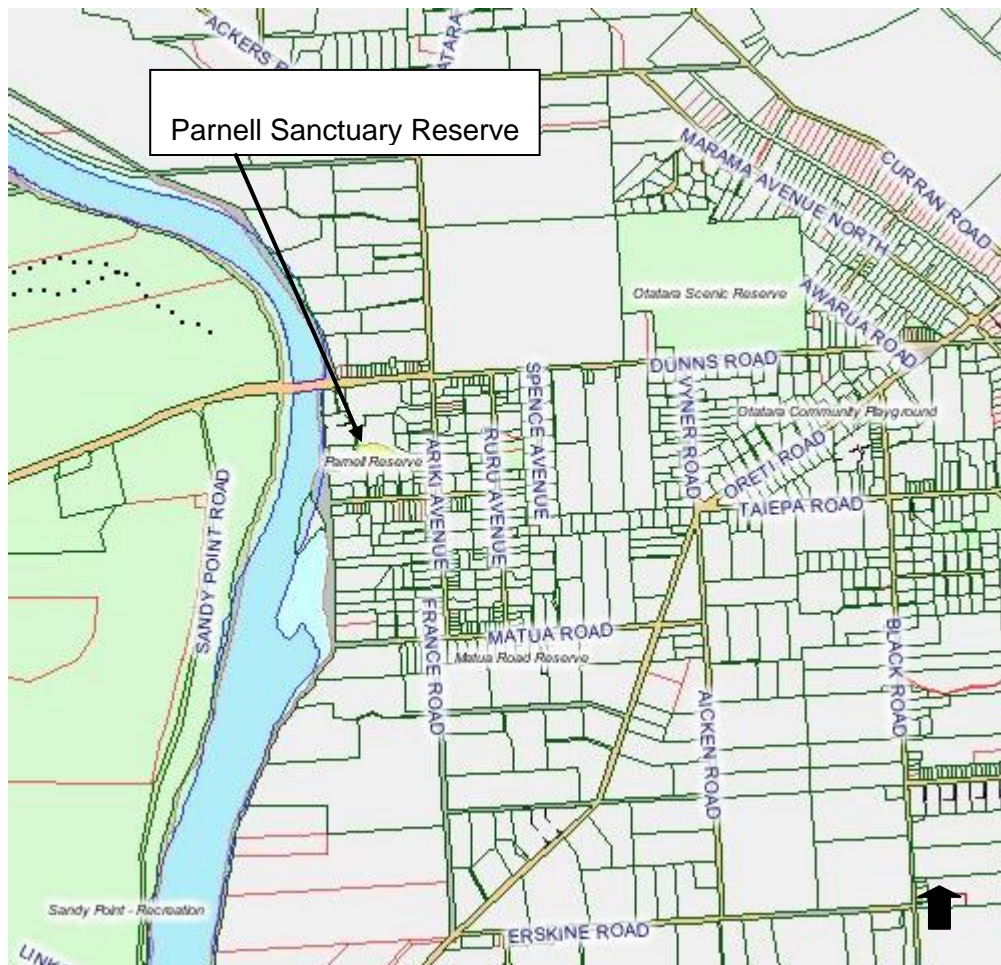
Parnell Sanctuary Reserve is located at 38 Ariki Avenue, Otatara.

The narrow street frontage hides the extent of the Reserve, which is tucked in amongst residential properties. Adjoining land to the northwest of the Reserve is used for grazing.

The Reserve boundary is virtually indistinguishable where the bush spreads into neighbouring land. The boundary fences of Parnell Sanctuary Reserve are, in places, non-existent. Provided there is no risk of stock being able to access the Reserve, a fence is not necessary.

There is no formed public access into Parnell Sanctuary. Legal access can be gained from both the Ariki Avenue street frontage and along the access strip that leads from the eastern bank of the Oreti River.

Vehicle parking is along the Ariki Avenue roadside.



Location of Parnell Sanctuary Reserve

### 5.7.3 History

Parnell Sanctuary Reserve was originally part of the larger Vickery homestead and was more recently owned by Mr and Mrs Parnell. Upon subdivision of the original area, Lot 10 was vested in Council as reserve.

Ariki Scenic Reserve was the original name for the Reserve when Council took over management of the land. At the request of the previous owners, Council resolved to name the Reserve after Mr and Mrs Parnell, along with the original name of the house to 'Sanctuary'.

### 5.7.4 Tenure

Classification:	<b>Scenic Reserve s.19 (1) (b)</b>
Legal Description:	Lot 10 DP 12374
Area:	2.0015 hectares
Certificate of Title:	406651
Subject to:	Reserves Act 1977

### 5.7.5 Flora

Parnell Sanctuary Reserve is part of the significant sand dune and sand plain forest remnants of the Otatara-Sandy Point area.



The canopy within the reserve is predominantly totara but both matai and kahikatea are also common.

The majority of the sub-canopy layer up of broadleaved/angiosperm, consisting mainly of kohuhu, lemonwood, pepperwood and occasional cabbage trees. Other sub-canopy species include pokaka, seven finger, tree fuchsia and round-leaved coprosma.

Groundcover is mainly hound's tongue fern, bush flax, crown fern and *Blechnum* 'brown-scale'.

Below is a list of flora known to be present in the forest remnants in Parnell Sanctuary Reserve. Not all of these species will necessarily be present in Parnell Sanctuary Reserve (Bill, 1999)

\* Introduced / exotic species

<b>Botanical Name</b>	<b>Common Name</b>
* <i>Acer pseudoplatanus</i>	Sycamore
<i>Aristotelia serrata</i>	Wineberry
<i>Asplenium bulbiferum</i>	Hen and Chicken fern
<i>Asplenium flaccidum</i>	Hanging spleenwort
<i>Astelia fragrans</i>	Bush flax
* <i>Berberis darwinii</i>	Darwin's barberry
* <i>Betula pendula</i>	Silver Birch
<i>Blechnum discolor</i>	Crown fern
<i>Blechnum</i> sp. 'brown scale'	Common hard fern
<i>Calystegia tuguriorum</i>	Native bindweed
<i>Carpodetus serratus</i>	Putaputaweta or marbleleaf
* <i>Cirsium arvense</i>	Californian thistle
* <i>Cirsium vulgare</i>	Scotch thistle
<i>Coprosma areolata</i>	Small leaved shrub
<i>Coprosma grandiflora</i>	Kanono
<i>Coprosma lucida</i>	Glossy karamu
<i>Coprosma parviflora</i>	Small leaved shrub
<i>Coprosma rotundifolia</i>	Round leaved coprosma
<i>Cordyline australis</i>	Cabbage tree
* <i>Cotoneaster simonsii</i>	Cotoneaster
* <i>Crateagus monogymna</i>	Hawthorn
* <i>Crococsmia x crocosmiiflora</i>	Montbretia
<i>Cyathea smithii</i>	Soft tree fern
<i>Dacrycarpus dacrydioides</i>	Kahikatea
<i>Dacrydium cupressinum</i>	Rimu
* <i>Daphne laureola</i>	Spurge-laurel
<i>Dicksonia fibrosa</i>	Ponga
<i>Dicksonia squarrosa</i>	Wheki (a tree fern)
* <i>Digitalis purpurea</i>	Foxglove
<i>Elaeocarpus hookerianus</i>	Pokaka
<i>Fuchsia excorticata</i>	tree fuchsia
* <i>Galeobdolon luteum</i>	Aluminium/Artillery Plant
<i>Hebe salicifolia</i>	Koromiko
* <i>Hedera helix</i>	Ivy
* <i>Heracleum mantegazzianum</i>	Giant hogweed

<i>Histiopteris incisa</i>	Water fern
* <i>Hydrangea spp.</i>	Hydrangea
<i>Hypolepis rufobarbata</i>	Fern
<i>Hypolepis tenuifolium</i>	Fern
* <i>Ilex aquifolium</i>	Holly
<i>Leptospermum scoparium</i>	Manuka
<i>Muehlenbeckia australis</i>	Pohuehue
* <i>Mycelis muralis</i>	Wall lettuce
<i>Parsonia heterophylla</i>	NZ Jasmine or kaihua
<i>Pennantia corymbosa</i>	Kaikomako
<i>Phymatosorus diversifolius</i>	Hounds tongue fern
<i>Pittosporum eugenoides</i>	Lemonwood or tarata
<i>Pittosporum tenuifolium subsp. colensoi</i>	Kohuhu
<i>Plagianthus regius</i>	Ribbonwood
<i>Podocarpus hallii</i>	Hall's totara
<i>Podocarpus totara</i>	Totara
<i>Polystichum vestitum</i>	Prickly shield fern
<i>Prumnopitys ferruginea</i>	Miro
<i>Pseudopanax colensoi</i>	Three finger
<i>Pseudopanax crassifolius</i>	Lancewood
<i>Pseudowintera colorata</i>	Horopito or pepperwood
<i>Pteridium esculentum</i>	Bracken
* <i>Ribes sanguineum</i>	Flowering currant
* <i>Rubus fruticosus</i>	Blackberry
* <i>Rubus laciniatus</i>	Blackberry – cut leaved
* <i>Sambucus nigra</i>	Elderberry
<i>Schefflera digitata</i>	Pate or Seven finger
<i>Senecio minimus</i>	Groundsel
* <i>Solanum dulcamara</i>	Bittersweet herb
<i>Sonchus kirkii</i>	Shore puha
<i>Sophora microphylla</i>	Kowhai
* <i>Tropaeolum speciosum</i>	Flame flower
* <i>Ulex europaeus</i>	Gorse
<i>Weinmannia recemosa</i>	Kamaha

#### 5.7.5.1 Pest Plants

A large range of unwanted exotic species exist at canopy, sub-canopy and ground level in Parnell Sanctuary Reserve. These include pohuehue, blackberry, flame flower, bittersweet herb, wall lettuce, flowering currant, hydrangea, aluminium plant, giant hogweed and sycamore.

#### 5.7.6 **Fauna**

This area supports many endemic forest birds (bellbirds (*Anthornis melanura*), tui (*Prothemadera novaeseelandiae*), fantails (*Rhipidura fuliginosa*), greywarblers (*Gerygone igata*) and silvereyes (*Zosterops lateralis*)), as well as nationally threatened species (fern bird (*Bowdleria punctata*), wood pigeons (*Hemiphaga novaeseelandiae*)).

### 5.7.7 Amenity Value

Parnell Sanctuary Reserve provides significant amenity value to the Otatara community as an important forest remnant.

This Reserve provides a valuable area of native bush remnant allowing a protected habitat for native plants, birds and invertebrates.

### 5.7.8 Recreational Use

Parnell Sanctuary Reserve currently offers minimal recreational opportunities to the Otatara and Invercargill community. A sign on the street frontage indicates its existence. However, with no formed walking tracks into the Reserve, it receives little public attention.



The size of this Reserve does not lend itself to having a loop track through it. This Reserve could be used to link other areas of open space in the Otatara area if a walkway from Ariki Avenue through to the Oreti River banks is developed.

### 5.7.9 Policies

#### 5.7.9.1 Access Into and Through Reserves

There is no public access into Parnell Sanctuary Reserve. A very preliminary concept for this Reserve is to provide a pedestrian link between Ariki Avenue and the Oreti River while ensuring the natural values of the Reserve are protected.

*Policy:*

- 5.7.9.1.1 To provide the necessary tracks and facilities to allow the public safe access through the Reserve in the distant future when the need arises and as resources permit.

#### 5.7.9.2 Boundaries and Fencing

*Policy:*

- 5.7.9.2.1 Should public access be developed through to the Oreti River, fencing may be required to separate track users from adjoining properties.



## 5.8 PATERSON RESERVE (LOCAL PURPOSE)

### 5.8.1 Introduction

Paterson Reserve is a large area of open space comprised of wetland and open grassland. The western boundary of the Reserve is adjacent to Bowman's Bush. Bowman's Bush is a forest remnant owned by the QEII National Trust and managed by the Invercargill City Council Parks Division.

The Reserve's natural features of predominantly open space and wetland provide a link with Bowman's Bush and offer a variety of environments to walk, run, picnic and partake in other informal recreational activities.



Aerial of Paterson Reserve (flown 2011)

### 5.8.2 Location and Access

Situated at 34 Spence Avenue, Otatara, Paterson Reserve is one of the only reserves at present in this area with visible street frontage.

Paterson Reserve is located to the west of Spence Avenue and backs onto Bowman's Bush.

Pedestrian access to the Reserve is from Spence Avenue and Ruru Avenue via Bowman's Bush. Vehicle access ends at the Spence Avenue or Ruru Avenue roadsides.

There is a link through to Ruru Ave via an informal grass trail, boardwalk, a bridge and walking tracks through Bowman's Bush.



Location of Paterson Reserve

### 5.8.3 History

The piece of land that runs through from Dunns Road to Matua Road was owned by John and Isobel Paterson.

The family operated a Post Office from their home for the Otatarā District in the early 1900s. They had the only phone in the district so the people of Otatarā would come and collect their mail and could use their phone (the phone was probably only used for emergencies in those days).

As part of the Post Office duties, the family also delivered telegrams during World War I to those in the Otatarā district who were being informed of the death of their sons at war.

The homestead was passed in to John Paterson Junior after the death of his mother.

When John Paterson (bachelor) died, the entire property was sold by all of the nieces and nephews of the Paterson family to Mr Spence.

Mr Spence subdivided the land and kept one of the sections as a reserve contribution.

As part of the reserve contribution required at the time, it was a condition of subdivision that Lot 22 was to be vested as a reserve. In 1995 Lot 22 DP 13636 was vested as a Local Purpose Reserve by the Invercargill City Council.

The Reserve was named after a Mr Jim Paterson by the Otatara community.

#### 5.8.4 Tenure

Classification:	<b>Local Purpose Reserve</b>
Legal Description:	Lot 22 DP 13636
Area:	0.3440 hectares
Certificate of Title:	SL11A/350
Subject to:	Reserves Act 1977

#### 5.8.5 Flora

The majority of Paterson Reserve is mown grass with a central wetland area.

Plantings at Paterson Reserve are useful as a barrier to wind, aesthetically pleasing and attract other native fauna.

Areas of wet ground have been planted with native grasses, cabbage trees, flax and pittosporum to create a wetland environment. A boardwalk over the wetland helps to protect vegetation and allow visitors access across the reserve.



Boundaries of the adjoining residential properties have been planted with mixed native species.

A strip of vegetation along the western boundary of Paterson Reserve adjoins with Bowman's Bush. The vegetation type of Bowman's Bush is sand plain mixed podocarp forest, with the dominant canopy species being kahikatea, pokaka, rimu, totara, matai and miro.

The middle tier is dominated by pepperwood, red mapau and *Coprosma areolata*. A large amount of regenerating ponga and tree fuchsia was noted.

The ground tier is dominated by prickly shield fern, bush flax, hounds tongue fern and crown fern.

### 5.8.5.1 Pest Plants

Pest plants in Otatara that may also potentially be in Paterson Reserve include: blackberry, gorse, broom, Old Man's Beard, cotoneaster, Darwin's barberry, sycamore, aluminium plant/artillery plant and ivy.

Some of these may exist along the Paterson Reserve edge adjoining Bowman's Bush. They will still cause problems if not managed and controlled.

### 5.8.6 **Fauna**

There has been no recorded information of the fauna present at Paterson Reserve. It is likely that, due to the western boundary adjoining with Bowman's Bush, fauna observed may be similar for both reserves.

Below is a list of observed native and introduced bird species in the area (Bowman's Bush Management Plan, 2005).

#### Native Species

Scientific Name	Common Name	
<i>Anthornis melanura</i>	Bellbird	Regularly present and breeding
<i>Chalcites lucidus</i>	Shining Cuckoo	Summer migrant Parasite breeder
<i>Finschia novaeseelandiae</i>	Brown Creeper	Breeding in general area
<i>Gerygone igata</i>	Grey Warbler	Regularly present and breeding
<i>Hemiphaga novaeseelandiae</i>	NZ Pigeon	Regularly present and breeding
<i>Petroica macrocephala</i>	S I Tomtit	Occasionally present - scarce in general area
<i>Ripidura fuliginosa</i>	Fantail	Regularly present and breeding
<i>Anthornis melanura</i>	Bellbird	Regularly present and breeding
<i>Chalcites lucidus</i>	Shining Cuckoo	Summer migrant Parasite breeder
<i>Finschia novaeseelandiae</i>	Brown Creeper	Breeding in general area

#### Introduced Species

Scientific Name	Common Name	
<i>Carduelis carduelis</i>	Goldfinch	Resident and breeding
<i>Carduelis flammea</i>	Redpoll	Resident and breeding
<i>Fringilla coelebs</i>	Chaffinch	Resident and breeding
<i>Prunella modularis</i>	Hedge Sparrow	Resident and breeding
<i>Sturnus vulgaris</i>	Starling	Occasionally present
<i>Turdus merula</i>	Blackbird	Resident and breeding
<i>Turdus philomelos</i>	Song thrush	Resident and breeding

### 5.8.7 **Amenity Value**

Paterson Reserve provides open views and visual relief for the properties that border onto the reserve and for people travelling through the Reserve along the formed trail.



Recent native plantings have created an attractive wetland.

### 5.8.8 Recreational Use

There are limited recreational facilities provided at Paterson Reserve. The reserve provides natural surroundings and an open space for public use, enjoyment and recreation at any time.

A walking trail links through to Ruru Ave, via Bowman's Bush. Once crossing the bridge and entering Bowman's Bush the track becomes a loop.



### 5.8.9 Policy

#### 5.8.9.1 Classification

While Paterson Reserve is presently classified as Local Purpose Reserve, it is foreshadowed that, as a consequence of this Management Plan, application shall be made to the Minister for the area to be classified as a Scenic Reserve.

This would not inhibit public use of the Reserve but would recognise the importance of the preservation of the vegetation to the local community.

#### Objectives:

- *To protect, preserve and enhance the intrinsic values of Paterson Reserve.*
- *To apply to Minister of Conservation to have Paterson Reserve classified as a Scenic Reserve as defined in Section 19 of the Reserves Act.*

#### Policies:

- 5.8.9.1.1 Paterson Reserve shall be managed as a Local Purpose Reserve pursuant to Section 23 of the Reserves Act 1977.
- 5.8.9.1.2 Council eventually aims to manage Paterson Reserve as a Scenic Reserve pursuant to Section 19 of the Reserves Act 1977. A request will be made to the Minister to have Paterson Reserve classified as a Scenic Reserve as defined in Section 19 of the Reserves Act 1977.



## 5.9 RED TUSSOCK RESERVE (SCENIC)

### 5.9.1 Introduction

Red Tussock Reserve contains a remnant of red tussock (*Chionochloa rubra*) that is the only one of its kind within the Invercargill City area. Such areas of tussock are uncommon and very fragmented throughout the region, making them locally significant.



Aerial of Red Tussock Reserve (Flown 2011)

### 5.9.2 Location and Access

Red Tussock Reserve is located on the eastern edge of Invercargill, adjacent to Rockdale Road. It is south of the Otepuni Creek and the Southland Crematorium.

The Reserve is surrounded to the east and south by farmland and to the west by Rockdale Road, industrial sections and residential housing.

The Reserve is almost surrounded by a flood bank that lies to the north, east and some distance south of the Reserve, separating it from the Otepuni and its floodwaters. This forms a physical boundary to the Reserve. Rockdale Road forms the remaining boundary.

There is currently no formed public access into Red Tussock Reserve. However, unformed pedestrian access can be gained through a gate off Rockdale Road.



Location of Red Tussock Reserve

### 5.9.3 History

The vesting of this Reserve by the Invercargill City Council occurred as a result of a 1996 subdivision. The subdivision was undertaken by the Southland Regional Council (Environment Southland) for land it acquired for flood protection work.

Vegetation within the Reserve was recognised at the time as being worthy of protection. Therefore, a condition of the subdivision was: 'the low lying land to the south of the crematorium area to vest as local purpose reserve'.

Lot 9 DP 13694 was later classified as a Scenic Reserve, at the recommendation of the Parks Manager, to recognise the special significance of the remnant red tussock and to afford the highest protection to the area.

### 5.9.4 Tenure

Classification:	<b>Scenic Reserve s. 19 (1) (b)</b>
Legal Description:	Lot 9 DP 13694
Area:	1.3499 hectares
Certificate of Title:	SL11A/605
Subject to:	Reserves Act 1977



View from North West Corner

### 5.9.5 Flora

The Invercargill District Plan (2005) identifies Red Tussock Reserve as an area containing 'Significant Indigenous Vegetation and Significant habitats of Indigenous Fauna'.

Red tussock is the dominant species within the Reserve and ranges in height from 1-2 metres. Other canopy species include mingimingi, flax and jointed wire rush.

Below is a list of flora known to be present in Red Tussock Reserve (Bill, 1999)

* <i>Introduced / exotic species</i>	
<b>Botanical Name</b>	<b>Common name</b>
* <i>Agrostis stolonifera</i>	Creeping bent
* <i>Agrostis tenuis</i>	Browntop
<i>Blechnum penna-marina</i>	Alpine hard fern
<i>Carex coriacea</i>	Cutty grass
<i>Chionochloa rubra</i>	Red tussock
<i>Coprosma propinqua</i>	Mingimingi
* <i>Cytisus scoparius</i>	Broom
* <i>Holcus lanatus</i>	Yorkshire fog
* <i>Juncus bufonius</i>	Toad rush
<i>Leptocarpus similis</i>	Jointed wire rush
* <i>Lotus pedunculatus</i>	Lotus grass
<i>Phormium tenax</i>	Flax
<i>Ranunculus repens</i>	Creeping buttercup
* <i>Rosa rubiginosa</i>	Sweet briar
* <i>Rubus fruticosus</i>	Blackberry
* <i>Rubus laciniatus</i>	Cut-leaved blackberry
<i>Solanum dulcamara</i>	Bittersweet herb
* <i>Ulex europaeus</i>	Gorse

#### 5.9.5.1 Pest Plants

A high number of introduced/exotic species are present in the reserve. Gorse is the most dominant, as well as blackberry, cut leaved blackberry, bittersweet, broom, and lotus grass. Pasture grasses and sweet briar also exist.

#### 5.9.6 **Fauna**

A high number of frog calls (species unknown) were heard during the study of 'areas of indigenous vegetation and significant habitats of indigenous fauna' by Bill (1999). Other information on the fauna in the reserve is unknown.

#### 5.9.7 **Amenity Value**

As this remnant of red tussock (*Chionochloa rubra*) is the only one of its kind in the Invercargill City area, Red Tussock Reserve offers the Invercargill community an important botanical resource.

"It differs from other red tussock land areas, which are either in association with estuarine environments (e.g. Woodend), peat lands of the Awarua Plains, or the pea gravels of Tiwai Peninsular" (Bill, 1999).

Such areas of tussock are uncommon and very fragmented throughout the region, making them significant. They are classed as one of the 'missing' ecosystems in the protected area network.

Control and restoration work will enhance this remnant and protect the natural heritage for future generations. Currently, very few people will be aware of the reserve's existence or importance.

#### 5.9.8 **Recreational Use**

This is a relatively small reserve and is therefore susceptible to human influences such as trampling and the introduction of exotic species.

Red Tussock Reserve currently provides minimal recreational opportunities in order to control these human influences. The primary purpose is to protect the Reserve's scenic and conservation values for future generations.

An unformed walkway from the gate off Rockdale Road provides a short walk along the flood bank. The flood bank provides views over the Reserve. Future development of access and walkways into Red Tussock Reserve should be limited.

#### 5.9.9 **Policies**

##### 5.9.9.1 Access Into and Through Reserves

There is no public access into Red Tussock Reserve. Future public access, if there is to be any, should be limited to reduce potential pedestrian or vehicle damage. Widespread public access through the Reserve should be avoided.

Future public access should be limited to a defined area of the Reserve for educational or recreational purposes.

Objectives:

- *To prioritise the natural resources within the Reserve when looking at future development of access ways.*
- *To limit public access into Red Tussock Reserve.*

Policy:

5.9.9.1.1 Only minimal public access will be permitted into Red Tussock Reserve in the future. Priority will be given to the protection of the natural resource.

5.9.9.2 Signage

Currently very few people in the Invercargill City know where the Red Tussock Reserve is and are unaware of the significance of the vegetation within it.

Signage will help to raise the profile of this Reserve and educate the public on its importance.

Objective:

- *To consider potential interpretational signage for enhancing conservation values at Red Tussock Reserve.*

Policies:

5.9.9.2.1 A reserve entrance sign shall be erected at the entrance to Red Tussock Reserve, along the Rockdale Road fence line.

5.9.9.2.2 Any interpretational material for the reserve will be considered in the distant future to promote conservation values.





## 5.10 SEAWARD BUSH RESERVE (SCENIC)

### 5.10.1 Introduction

Seaward Bush is a relatively large remnant of regenerating native kamahi forest. It is recognised as an area of significant indigenous vegetation in the Invercargill City District.

Seaward Bush's attractiveness as a natural environment offers an important recreational resource, providing opportunities for picnicking, walking, running and as an educational 'classroom'.



Aerial of Seaward Bush (flown 2011)

### 5.10.2 Location and Access

Seaward Bush is located approximately nine kilometres from the centre of Invercargill.

It is bounded in the north by Mason Road and in the south by Endowment Road.

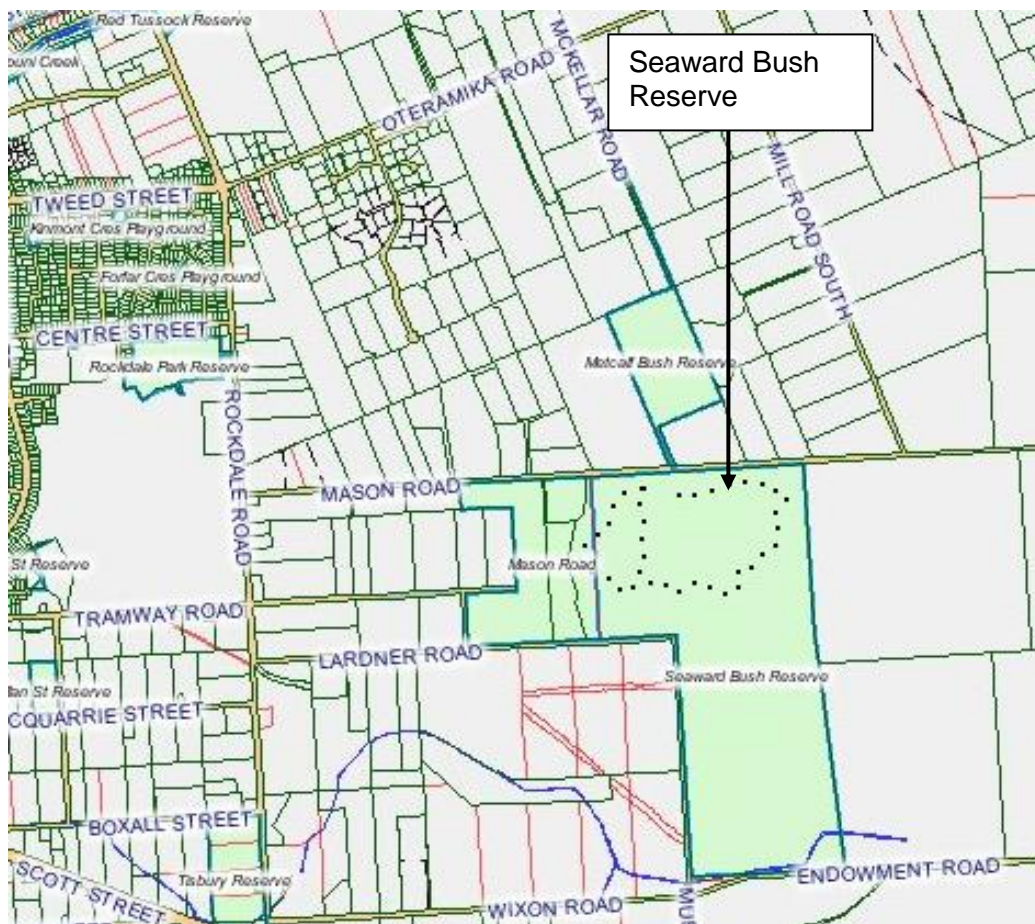
The Reserve is close to Metcalf Bush Reserve, which adds to its importance as a forest remnant.

Neighbouring land to the east contains forestry plantation, native vegetation and farmland.

An Urupa or Maori burial ground will be developed by Murihiku Iwi in the future on land fronting Mason Road on the western boundary. The unformed Lardner and Murphy Roads also form part of the western boundary.

Visitors can access Seaward Bush off Mason Road. Mason Road frontage provides roadside parking for vehicles. Walking tracks through Seaward Bush start from here.

Legal access is also available from Endowment Road, although there is no formal public access.



Location of Seaward Bush Reserve

### 5.10.3 History

Seaward Bush was formerly known as Otarewa Bush and comprised of a large tract of native forest lying to the south of Invercargill.

Its northernmost limit extended almost to Tweed Street, and it extended southwards to Woodend or a little further. To the west it stopped at the swamplands bordering the estuary.

The area, predominantly kahikatea forest in the Southland Hospital grounds at Kew, is the last surviving remnant of the western portion of the Seaward Bush.

The eastern extent of the native bush is less certain, but it appears to have been as far as the settlement of Rimu and Kapuka. South of Seaward Bush was the boggy or swampy Awarua Plains area which was known as Seaward Moss.

A large portion of the Seaward Bush area was classified as Municipal Endowment and was under the Council's control since the late 1870's.



A map drawn in 1865 shows an area that included much of the later municipal endowment, as being 'Let for Saw Mills'.

The whole area of municipal endowment was let out for timber cutting rights.

Lithographs made from photographs which were taken in the 1880's show that fine timber remained and that extensive felling was in progress at that time.

Following the clear felling of the bush the remaining bush was left to revert to second growth scrub and regenerate.

The destruction of the bush, particularly in the area which was later to become the Reserve, must have been fairly complete. This is evidenced by an almost complete absence of any kind of mature trees in the Reserve.

Otarewa Bush was renamed Seaward Bush following the logging.

From early records, it appears that the first person to attach any value to the bush as a reserve area was J. A. McPherson who, in 1927, started referring to it as a scenic reserve.

In 1928, Mr McPherson informed Council that the bush area had been fenced off and that a new scenic reserve had been formed because of recreational and scenic attributes. At that stage, it was still Municipal Endowment and had no formal recognition as a reserve.

In 1931, the first walking tracks were formed and they were constructed by unemployed workers under the No 5 scheme. Unfortunately this was the era when it was popularly believed that native forest required protection from wind,

and it was in 1931 that James McPherson planted the first pines along the western boundary.

When Mr B P Mansfield became Superintendent of Reserves, he had the Mason Road picnic area cleared and formed. He also organised the construction of a new walking track that went out to Lardner Road.

It was reported that on 23 November 1934 a deliberately lit fire spread into the bush a short distance. Fortunately it did little damage.

Mr Mansfield was also responsible for having *Nothofagus fusca* planted along the Mason Road frontage in 1935, with only one or two still remaining.

A picnic shelter was transported from Thomsons Bush and re-erected in Seaward Bush. The exterior was clad with the fern trunks so as to make it 'aesthetically' more pleasing. It was probably demolished during or after World War II.

Up until 1969, the land was classified as Municipal Endowment to be held in trust in aid of city funds.

In September 1969, the Commissioner of Crown lands wrote to the City Council requesting that it give consideration to having the area (255 acres) become a Scenic Reserve under the Reserves and Domains Act 1953.

The proposal suggested that ownership of the land be transferred to the Crown and then control of the Reserve be vested in the City Council. Council agreed to that proposition but in 1971, after taking legal advice, decided to retain ownership of the land.

Instead of the classification of Scenic Reserve the Council decided to have it classified as a Recreation Reserve. A notice in the New Zealand Gazette (15 March 1973) proclaimed the 256 acre (103.8423 ha) area of Seaward Bush classified as a Recreation Reserve with the Invercargill City Council holding the land in fee simple.

Over the years, a considerable amount of work has been carried out in the reserve by volunteer groups. Track work was done by the Y's Men's Club, Awarua Jaycee Incorporated and pupils of Southland Boys High School in the 1960's and through the 1970's.

In 1977 the Awarua Jaycee Inc. erected a picnic shelter and barbecue. That organisation also undertook a major upgrading of the main walking track in 1980. A shingle surface was laid on the track and boardwalks and bridges were constructed over muddy areas.

In 1988-1989, a link to an old disused track in the eastern portion created a substantially longer circular route. Work on that new section and updating the old track was completed by periodic detention labour.

The Invercargill City Council resolved to incorporate Lot 3 DP 359516 into the reserve for recreation purposes (Transfer 7627253.1) in 2004. In addition to the incorporation of Lot 3, Council also resolved that the classification of Seaward Bush Reserve be Scenic Reserve.

In 2008, Lots 1 DP 7967 and 3 DP 359516 were gazetted as a Scenic Reserve for the purposes specified in section 19(1)(b) of the Reserves Act 1977. Seaward Bush now covers just over 107 hectares.

#### 5.10.4 Tenure

Classification:	<b>Scenic Reserve s.19 (1) (b)</b>
Legal Description:	Lot 1 DP 7967, Lot 3 DP 359516
Area:	107.8933 hectares
Certificate of Title:	242294
Subject to:	Reserves Act 1977 Section 241(2) Resource Management Act 1991(affects DP 359516)

#### 5.10.5 Flora

Historical evidence, in the form of lithographs made from photographs taken in the 1880's, illustrate that Seaward Bush was originally dense and a very fine lowland podocarp forest. Rimu and matai appear to have been the two dominant species, although miro, kahikatea, and Hall's totara were also present in reasonable numbers.

Other large canopy trees were kamahi and pokaka. Under story trees were tree fuchsia, kohuhu, tarata, wine berry, putaputaweta, kaikomako, broadleaf, pate and three finger. Less common were lancewood, and raukawa.

The forest floor was rich in mosses, liverworts and quite a wide range of ferns.

As stated in the historical section, the destruction of the bush must have been fairly complete and virtually no mature trees were left standing. However, the area must have had a reasonable number of young or sapling trees, as well as more mature trees, left on it.

There is a reasonable number of podocarps that were probably saplings at the time of clear felling. Today the bush is an excellent example of the way in which cut over native forest can regenerate. A study by Bill (1999) showed that regeneration of broadleaf, tree fuchsia, kohuhu, kahikatea and miro was noted.

Pine trees have been planted along the Endowment Road boundary and macrocarpa along the western boundary with the cemetery reserve, as was the custom in the 1950's.

To the south of Lardner Road, an irregular line of somewhat scattered old pine trees indicates a much earlier attempt to shelter the forest from the effects of wind. It is now realised that it is better to allow the vegetation to develop its own windproof margin, which is not only more effective and less damaging than a coniferous shelter belt, but also has a more natural appearance.

Below is a list of flora known to be present in Seaward Bush (Seaward Bush Management Plan, 1994)

\* Introduced / exotic species

<b>Botanical Name</b>	<b>Common Name</b>
* <i>Acer pseudoplatanus</i>	Sycamore
<i>Aristolelia serrata</i>	Wineberry or mako mako
<i>Asplenium bulbiferum</i>	Hen and Chicken fern
<i>Asplenium flaccidum</i>	Hanging spleenwort
<i>Blechnum discolor</i>	Crown fern
<i>Blechnum fluviatile</i>	Kiwakiwa
<i>Blechnum penna marina</i>	Alpine hard fern
<i>Blechnum procerum</i>	Fern/small kiokio
<i>Blechnum species no. 1</i>	Kiokio
* <i>Calystegia silvatica</i>	Convolvulus
<i>Carpodetus serratus</i>	Putaputaweta or marbleleaf
<i>Cirsium arvense</i>	Californian thistle
<i>Cirsium lanceolatum</i>	Scotch or spear thistle
<i>Clematis paniculata</i>	Puawhananga
<i>Conium maculatum</i>	Hemlock
<i>Coprosma foetidissima</i>	Stinkwood
<i>Coprosma lucida</i>	Karanga
<i>Coprosma propinqua</i>	Mingimingi
<i>Coprosma rhamnoides</i>	Divaricating Native shrub
<i>Coprosma rotundifolia</i>	Round leaved coprosma
<i>Crataegus monogyna</i>	Hawthorn
<i>Cyathea smithii</i>	Wheki
* <i>Cytisus scoparius</i>	Broom
<i>Dacrycarpus dacrydioides</i>	Kahikatea
<i>Dacrydium cupressinum</i>	Rimu/Red Pine
<i>Dicksonia fibrosa</i>	Ponga
<i>Dicksonia squarrosa</i>	Wheki (a tree fern)
<i>Elaeocarpus hookerianus</i>	Pokaka
<i>Epilobium ciliatum</i>	Willow Herb
<i>Fuchsia excorticata</i>	Tree fuchsia or kotukutuku
<i>Fuchsia perscandens</i>	Climbing fuchsia
<i>Grammitis magellanica ssp. Nothofageti</i>	Fern
<i>Griselinia littoralis</i>	Broadleaf
<i>Histiopteris incisa</i>	Water fern
<i>Hydrocotyle heteromeria</i>	Pennywort or hydrocotyle
<i>Hymenophyllum bivalve</i>	Fern
<i>Hymenophyllum demissum</i>	Drooping filmy fern
<i>Hymenophyllum flabellatum</i>	Fern
<i>Hymenophyllum rarum</i>	Fern
<i>Hymenophyllum revolutum</i>	Filmy ferns
* <i>Hypochaeris radicata</i>	Catsear
<i>Hypolepis ambigua</i>	Fern
<i>Ilex aquifolium</i>	Holly
<i>Leptopteris hymenophylloides</i>	Crepe fern
<i>Leptospermum scoparium</i>	Manuka
<i>Loranthus micranthus</i>	Mistletoe
<i>Lotus pedunculatus</i>	Lotus grass
<i>Lycopodium varium</i>	Hanging clubmoss
<i>Melicytus lanceolatus</i>	Mahoewao
<i>Metrosideros diffusa</i>	Climbing rata

<i>Muehlenbeckia australis</i>	Pohuehue
<i>Myrsine australis</i>	Mapou
<i>Myrsine divaricata</i>	Weeping matipo
<i>Neomyrtus pedunculata</i>	Native shrub/rohutu
<i>Nertera depressa</i>	The bead plant/fruited duckweed
<i>Nertera dichondrifolia</i>	Dicotyledonous
	Herb-non composite
<i>Nothofagus fusca</i>	NZ Red Beech
<i>Parsonsia heterophylla</i>	NZ Jasmine or kaihua
<i>Pennantia corymbosa</i>	Kaikomako
<i>Phymatosorus diversifolius</i>	Hounds tongue fern
<i>Pittosporum eugenoides</i>	Lemonwood or tarata
<i>Pittosporum tenuifolium</i>	Kohuhu
<i>Plantago lanceolata</i>	Narrow-leaved plantain
<i>Plantago major</i>	Broad-leaved plantain
<i>Podocarpus hallii</i>	Hall's totara
<i>Polystichum vestitum</i>	Prickly shield-fern
<i>Prumnopitys ferruginea</i>	Miro
<i>Prumnopitys taxifolia</i>	Matai
<i>Pseudopanax colensoi</i>	Three finger
<i>Pseudopanax crassifolius</i>	Lancewood
<i>Pseudopanax edgerleyi</i>	Raukawa
<i>Pseudowintera colorata</i>	Pepperwood or horopito
<i>Psilotaceae tmesipteris spp</i>	Fork fern
<i>Pteridium esculentum</i>	Bracken
* <i>Ranunculus repens</i>	Creeping buttercup
<i>Rubus australis</i>	Bush lawyer
<i>Rubus cissoides</i>	Bush lawyer
* <i>Rubus fruticosus</i>	Blackberry
* <i>Rumex obtusifolius</i>	Broad-leaved dock
<i>Rumohra adiantiformis</i>	Climbing shield Fern, leathery shield fern, leatherleaf fern, iron fern
<i>Schefflera digitata</i>	Pate or Seven finger
* <i>Senecio jacobaea</i>	Ragwort
<i>Senecio minimus</i>	Groundsel
* <i>Solanum dulcamara</i>	Bittersweet
<i>Stellaria gracilentia</i>	Small chickweed
<i>Trichomanes venosum</i>	Veined bristle fern, Veined filmy fern
<i>Trifolium pratense</i>	Red clover
* <i>Tropaeolum speciosum</i>	Flame flower
* <i>Ulex europaeus</i>	Gorse
<i>Viola cunninghamii</i>	Cunningham's violet
<i>Weinmannia racemosa</i>	Kamahi

#### 5.10.5.1 Pest Plants

Any introduced and exotic pest plants, such as pine, macrocarpa and beech, will need to be controlled and monitored to ensure their numbers are at a minimum or be progressively removed to ensure sustainability and viability.

Gradual infill with native plantings will help the viability of the indigenous forest.

### 5.10.6 Fauna

Unfortunately not much research has been carried out into the fauna of Seaward Bush and very little has been documented.

The species list below has been referenced from the Seaward Bush Management Plan (1994). This is the most recent known research on this area.

Below is a list of fauna a known to be present in Seaward Bush  
(Reference: *Seaward Bush Management Plan, 1994*)

Scientific Name	Common Name
<u>Invertebrates</u>	
<i>Acearanea</i> sp.	Spider
<i>Anabium punctatum</i>	Common borer beetle
<i>Apis mellifera</i>	Honey bee
<i>Bassaris generilla</i>	Red admiral
<i>Bombus terrestris</i>	Bumble bee
<i>Calliphora quadrimaculata</i>	Native blue bottle
<i>Clubiona convoluta</i>	Spider
<i>Crambus flexuosellus</i>	Common grass moth
<i>Diea</i> sp.	Spider
<i>Dyarcyops orepukiensis</i>	Spider
<i>Eristalis tenax</i>	Dronefly
<i>Forficula auricularia</i>	European earwig
<i>Hanseniella</i> sp.	Bush centipede
<i>Mecodema</i> sp.	Waisted ground beetle
<i>Melanostoma fasciatum</i>	Hoverfly
<i>Musa domestica</i>	Common house fly
<i>Oeceticus omnivorus</i>	Case moth
<i>Oncacantias vittatus</i>	Shield bug
<i>Parasarcophagus milleri</i>	Striped flesh fly
<i>Philaenus trimaculatus</i>	Spittle bug
<i>Pieris rapae</i>	White Butterfly
<i>Porcellia scaber</i>	Common slater
<i>Procordulia smithii</i>	Ranger dragonfly
<i>Protohystrica alcis</i>	Tachinid parasite
<i>Pyrontota festiva</i>	Manuka beetle
<i>Staphylinidae</i>	Rove beetle
<i>Syrphus novaezealandiae</i>	Hoverfly
<i>Tatosoma timora</i>	Common forest looper
<i>Theridiidae</i> sp.	Spider
<i>Trite reauricoma</i>	Spider
<i>Wainuia urnula</i>	Land snail
<i>Zealandotipula novarae</i>	Cranefly
<u>Vertebrates - Mammals</u>	
<i>Trichosorus vulpecula</i>	Brush-tailed possum Also possibly present: rats, mice, stoats and hedgehogs.
<u>Vertebrates - Amphibians and Reptiles</u>	
<i>Hoplodactylus granulatus</i>	Forest gecko
<i>Litoria ewingi</i>	Whistling brown Australian tree frog



<i>Litoria raniformis</i>	Green tree frog	
<b>Vertebrates - Avifauna</b>		
<i>Anthornis malaneura</i>	Bellbird	
<i>Athene noctua</i>	Little Owl	
<i>Chalcites lucidus</i>	Shining Cuckoo	O.V.
<i>Finschia novaeseelandiae</i>	Brown Creeper or Pipipi	R&B
<i>Fringilla coelebs</i>	Chaffinch	R&B
<i>Gerygone igata</i>	Grey warbler	R&B
<i>Hemiphaga novaeseelandiae</i>	NZ pigeon	R&B
<i>Ninox novaeseelandiae</i>	Morepork	
<i>Prothemadera novaeseelandiae</i>	Tui	
<i>Rhipidura fuliginosa</i>	Fantail	R&B
<i>Turdus merula</i>	Blackbird	R&B
<i>Turdus philomelos</i>	Song thrush	R&B
<i>Zosterops lateralis</i>	Silvereye	
<b>Key</b>		
Resident and Breeding	R&B	
Occasional Visitor	O.V.	

### 5.10.7 Amenity Value

As one of the few remaining areas of native bush in close proximity to the Invercargill City urban environment, Seaward Bush offers the Invercargill community an important recreational and scenic resource.

The close location of Seaward Bush to Metcalf Bush adds to the botanical importance of this reserve as a significant forest remnant in the Southland region.



To local residents it offers visual freedom from the confines of city living.

### 5.10.8 Recreational Use

Seaward Bush offers an important recreational resource, while management of the Reserve still prioritises on retaining its indigenous vegetation.

The Reserve provides opportunities for walking and running on the formed gravel tracks, taking dogs on a lead, picnicking, and as an educational classroom.

Many reserve visitors have an interest in its natural values. Community groups and schools have taken an active part in the development of walking tracks. Most of the maintenance work on the tracks is carried out by workgroups from the Department of Corrections - Community Probation Service under the guidance of Parks Division staff. General day-to-day maintenance is undertaken by the Parks Division Rangers.

Recreational facilities in Seaward Bush include a walking track and a self-contained accessible toilet. A concrete pad is all that remains of a picnic shelter, removed after it was vandalised in the 1990's. A rubbish bin is provided,

principally used for the disposal of dog faeces by the large number of visitors who walk their dogs in the reserve.

A large open picnic area faces Masons Road and a smaller picnic area located nearby is sheltered from the wind. Interest groups and families take advantage of these areas mainly in the summer months.



It is important that this Reserve be utilised to its full potential while ensuring the natural values are protected. Education, through signage and promotion, will help with this.

Interpretation signage has been provided at the east entrance of the Reserve to educate visitors on the environmental importance. The Reserve is included in the "Short Walks in The Invercargill Area" brochure which will help promote the Reserve.

Future walking track opportunities include: extending the existing tracks further into the reserve to provide a longer track, and linking to any walking tracks developed in the neighbouring Metcalf Bush in the future.



Walking Tracks in Seaward Bush

## 5.10.9 Policies

### 5.10.9.1 Classification

Seaward Bush has been recognised as a significant forest remnant in the Invercargill area. Classification as a Scenic Reserve under the Reserves Act 1977 ensures a high level of protection for the future.

The adjoining land on the east side of the Seaward Bush boundary consists of very high value wetland on peaty bog. Wetlands are few in the Invercargill district and, with such natural and scenic importance, this land has the potential to be amalgamated with Seaward Bush in the future.

#### Policy:

5.10.9.1.1 Adjoining land to the east of Seaward Bush will be amalgamated in the future.

### 5.10.9.2 Access Into and Through Reserves

Because of the size, location and level of use of Seaward Bush, only one vehicular entrance is necessary. Problems have arisen in the past with vehicles damaging the surface of the picnic areas, so during winter or periods of heavy rain Council has the ability to close off the entrances to vehicles. Pedestrians are still welcome to use the reserve during these times.

Access into Seaward Bush can also be gained from Endowment Road, although there is no formal public access from here. An old forestry vehicle track is still evident in this area.

#### Policies:

5.10.9.2.1 Vehicular access to Seaward Bush shall be limited to the Mason Road frontage.

5.10.9.2.2 Due to vandalism, vehicle access from Mason Road has been closed. Access for vehicles will only be for maintenance and emergencies, or with the written authority of Council.

5.10.9.2.3 Access into Seaward Bush from Endowment Road may be considered if there is enough demand for it. All vehicle entrances from Endowment Road shall be secured so that only maintenance and emergency vehicles can gain access.

### 5.10.9.3 Occupation Agreements

An area of forest on the eastern boundary has been cleared in the past and is currently being grazed by the neighbouring owner. This is an inappropriate use of a scenic reserve and this activity should be phased out in the future.

#### Objective:

➤ *To stop encroachments on reserve land.*

#### Policy:

5.10.9.3.1 The grazing of an eastern portion of the Reserve on the eastern boundary of Seaward Bush shall be phased out in future years.

#### 5.10.9.4 Dogs on Reserves

*Policy:*

- 5.10.9.4.1 Council has approved for Seaward Bush to be an off-lead area for dogs on a trial basis.

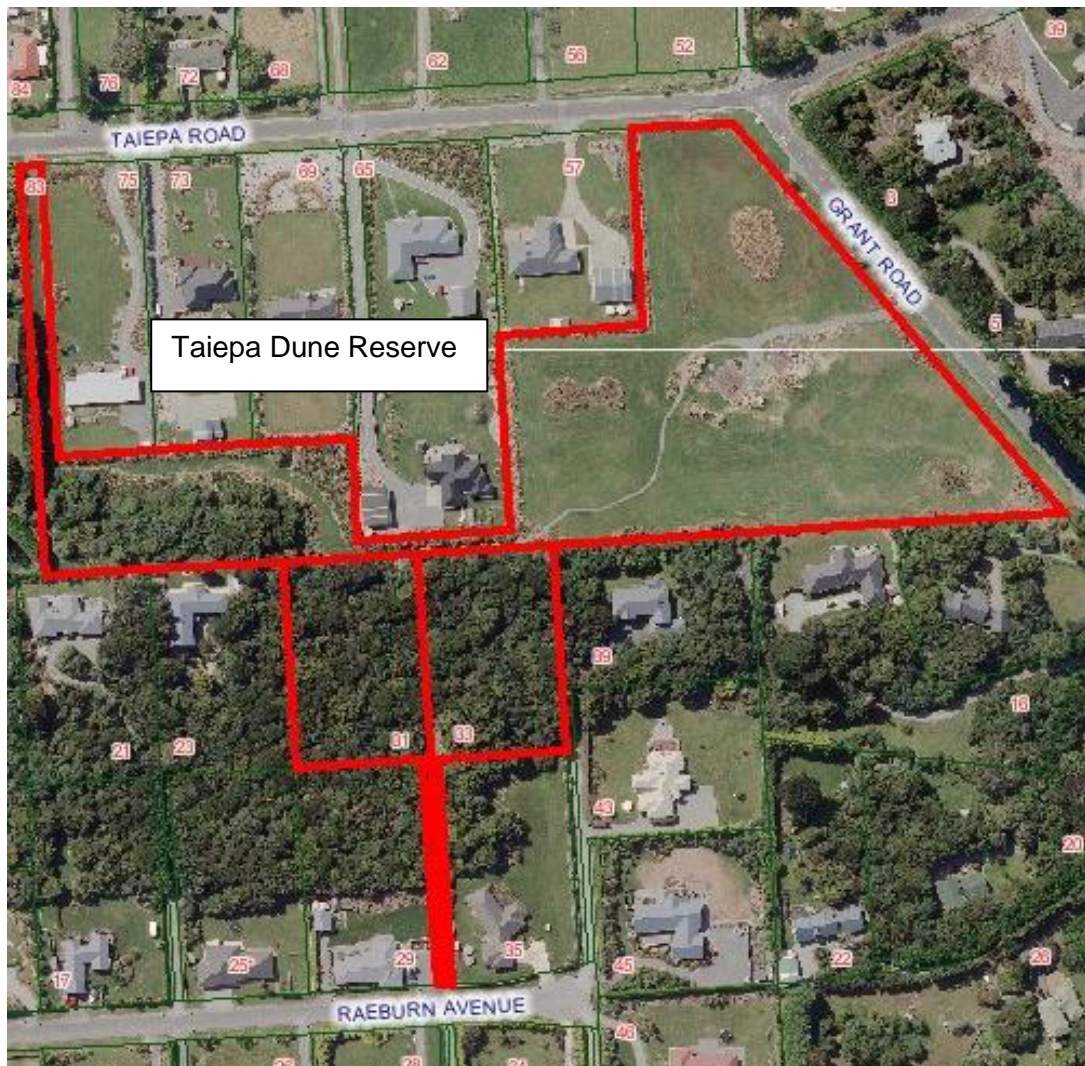
## 5.11 TAIIPA DUNE RESERVE (RECREATION AND SCENIC)

### 5.11.1 Introduction

Taiepa Dune Reserve is an irregularly shaped remnant of undulating land.

The southern half of the Reserve is part of a series of podocarp forest remnants in Otatara and also contains regenerating totara forest. At the eastern part of the reserve there are open grassy sand dune landforms.

Taiepa Dune Reserve provides visitors to the area with a walking track, open space for recreational activities and a children's playground.



Aerial of Taiepa Dune Reserve (flown 2011)

### 5.11.2 Location and Access

Taiepa Dune Reserve is located at 83 Taiepa Road, and at 31 and 33 Raeburn Avenue.

The largest portion is situated on the corner of Taiepa Road and Grant Road, with the south end extending to Raeburn Avenue.

Where there is no road frontage the Reserve is adjoined by residential land.

Public access can be gained off Raeburn Avenue, Grant Road and Taiepa Road. Vehicles can be parked on the road side of these three roads.

In 2008 construction of a walking track from Raeburn Avenue through to Grant Road was completed. This provides a thoroughfare for pedestrian access through the reserve to link all three access points.



Location of Taiepa Dune Reserve

### 5.11.3 History

Taiepa Dune Reserve (formerly known as Taiepa Road Reserve) was acquired by the Southland County Council in 1985 from the Crown by freehold certificate 4318 (Transfer 117976.1).

The land was originally purchased as a site for a community centre but that idea was later abandoned and another site chosen.

In 1992 the land was declared a Recreation Reserve by NZ Gazette Notice 1992 Page 1060 (GN 206785.1). In 1993 the land was transferred to the Invercargill City Council by transmission 206616.1.

In 2001 land was transferred to Neil James and Yvonne Margaret Jefcoate (Transfer 5067989.1) and in 2003 land was transferred back to Invercargill City Council (Transfer 5472197.1).



Taiepa Dune Reserve

The former Taiepa Road Reserve was originally open grassland, with little native remnant at the north of the boundary that adjoined Raeburn Reserve.

Raeburn Avenue Reserve was acquired by Council in 2003, following a proposal by the landowner to clear the vegetation for the construction of a residential dwelling and associated buildings. Council recognised the significance of the vegetation and purchased the land to protect the vegetation from further clearance. At the time Council recommended the reserve be classified as a scenic reserve.

In 2005, Council granted consent for Taiepa Road Reserve to be subdivided into Lots 1-6 Section 129, Block XX to create seven new allotments. Lot 7 was retained for the purposes of a Recreation Reserve.

In 2008 Lot 18 DP 13564 and Lot 19 DP 13564 were declared as a Scenic Reserve and further declared that the Reserve be known as Taiepa Dune Reserve. Lots 18 and 19 were originally Raeburn Avenue Reserve.

Since 2008, the Reserve has been developed, with native plantings in low-lying and wet areas of the reserve. A playground, walking tracks, a picnic table and seating have been put in.

### 5.11.4 Tenure

(a) Classification:	<b>Scenic Reserve s.19 (1)(b)</b>
Legal Description:	Lot 18 DP 13564, Lot 19 DP 13564
Area:	0.8400 ha
Certificate of Title:	SL11A/71, SL11A/72
	Subject to: Reserves Act 1977

(b) Classification:	<b>Recreation Reserve</b>
Legal Description:	Lot 7 DP 324202
Area:	2.5500 hectares
Certificate of Title:	97748
Subject to:	Reserves Act 1977 Section 8 Mining Act 1971 Section 5 Coal Mines Act 1979

### 5.11.5 Flora

Lot 7 is made up of grassland and wetland over the undulating sand dunes.

Plants used to develop a wetland environment in the low lying damp ground included: red tussock, cabbage trees, toe toe, flax and *Carex secta*.

Lots 18 and 19 include existing native vegetation and are located at the south end of the Reserve (originally Raeburn Reserve).

Overall, the forested area is totara dominant, running along a gentle dune (west-east). Other main canopy species of this forest fragment are pepperwood, manuka, kamahi, matai, rimu and emergent kahikatea.

Species of the sub canopy include wineberry, kohuhu, and kanono.

The groundcover is dominated by hounds tongue fern, prickly shield fern and bracken.

Vegetation at the Reserve is useful as a barrier to wind, aesthetically pleasing and attracts native birds and insects.

Recent plantings have enhanced and connected the forest fragments, adding to the importance of the Otatara remnants.

Extension of plantings using pioneer species from Otatara coastal sand dune forest include: broadleaf, Hall's totara, black pine, black mapau, lemonwood, red mapau, cabbage tree and wineberry.

Below is a list of flora known to be present in the existing forest remnants in the Raeburn Avenue area and in the more recent plantings at Taiepa Dune Reserve. Not all of these species will necessarily be present in Taiepa Dune Reserve (Bill, 1999).

\* Introduced / exotic species

<b>Botanical Name</b>	<b>Common name</b>
* <i>Acer pseudoplatanus</i>	Sycamore
<i>Aristotelia serrata</i>	Wineberry
<i>Asplenium bulbiferum</i>	Hen and Chicken fern
<i>Asplenium flaccidum</i>	Hanging spleenwort
<i>Astelia fragrans</i>	Bush flax
* <i>Berberis darwinii</i>	Darwin's barberry
<i>Blechnum discolor</i>	Crown fern
<i>Blechnum sp. 'brown scale'</i>	Common hard fern
<i>C. virgata</i>	Carex Secta
<i>Calystegia tuguriorum</i>	Native bindweed



<i>Carpodetus serratus</i>	Putaputaweta or marbleleaf
* <i>Chionochloa rubra</i>	Red Tussock
* <i>Cirsium arvense</i>	Californian thistle
* <i>Cirsium vulgare</i>	Scotch thistle
<i>Clematis vitalba</i>	Old Man's Beard
<i>Coprosma areolata</i>	Small leaved shrub
<i>Coprosma grandiflora</i>	Kanono
<i>Coprosma lucida</i>	Glossy karamu
<i>Coprosma parviflora</i>	Small leaved shrub
<i>Coprosma rotundifolia</i>	Round leaved coprosma
<i>Cordyline australis</i>	Cabbage tree
* <i>Cortaderia richardii</i>	Toe toe
* <i>Cotoneaster siminsii</i>	Cotoneaster
* <i>Crateagus monogymna</i>	Hawthorn
<i>Crococsmia x crocosmiiflora</i>	Montbretia
* <i>Cyathea smithii</i>	Soft tree fern
<i>Cytisus scoparius</i>	Broom
<i>Dacrycarpus dacrydioides</i>	Kahikatea
<i>Dacrydium cupressinum</i>	Rimu
* <i>Daphne laureola</i>	Spurge-laurel
<i>Dicksonia fibrosa</i>	Ponga
<i>Dicksonia squarrosa</i>	Wheki (a tree fern)
* <i>Digitalis purpurea</i>	Foxglove
<i>Elaeocarpus hookerianus</i>	Pokaka
<i>Fuchsia excorticata</i>	tree fuchsia
* <i>Galeobdolon luteum</i>	Aluminium/Artillery Plant
<i>Griselinia littoralis</i>	Broadleaf
<i>Hebe salicifolia</i>	Koromiko
* <i>Hedera helix</i>	Ivy
<i>Histiopteris incisa</i>	Water fern
<i>Hypolepis rufo-barbata</i>	Fern
<i>Hypolepis tenuifolium</i>	Fern
* <i>Ilex aquifolium</i>	Holly
<i>Leptospermum scoparium</i>	Manuka
<i>Muehlenbeckia australis</i>	Pohuehue
<i>Myrsine australis</i>	Red Mapau
<i>Parsonsia heterophylla</i>	NZ Jasmine or kaihua
<i>Pennantia corymbosa</i>	Kaikomako
<i>Phormium tenax</i>	Flax
<i>Phymatosorus diversifolius</i>	Hounds tongue fern
<i>Pittosporum eugenoides</i>	Lemonwood or tarata
<i>Pittosporum tenuifolium</i>	Black Mapau
<i>Pittosporum tenuifolium subsp. colensoi</i>	Kohuhu
<i>Plagianthus regius</i>	Ribbonwood
<i>Podocarpus hallii</i>	Hall's totara
<i>Podocarpus totara</i>	Totara
<i>Polystichum vestitum</i>	Prickly shield fern
<i>Prumnopitys ferruginea</i>	Miro
<i>Prumnopitys taxifolia</i>	Matai or Black Pine
<i>Pseudopanax colensoi</i>	Three finger

<i>Pseudopanax crassifolius</i>	Lancewood
<i>Pseudowintera colorata</i>	Horopito or pepperwood
<i>Pteridium esculentum</i>	Bracken
* <i>Rubus fruticosus</i>	Blackberry
* <i>Rubus laciniatus</i>	Blackberry - cut leaved
* <i>Sambucus nigra</i>	Elderberry
<i>Schefflera digitata</i>	Pate or Seven finger
<i>Senecio minimus</i>	Groundsel
* <i>Solanum dulcamara</i>	Bittersweet herb
<i>Sonchus kirkii</i>	Shore puha
<i>Sophora microphylla</i>	Kowhai
* <i>Tropaeolum speciosum</i>	Flame flower
* <i>Ulex europaeus</i>	Gorse
<i>Weinmannia racemosa</i>	Kamahi

The open north eastern portion of grassy sand dunes is largely weed free due to earlier grazing.

#### 5.11.5.1 Pest Plants

Pest plants in Otatara that are likely to be in Taiepa Dune Reserve include: blackberry, gorse, broom, Old man's Beard, cotoneaster, Darwin's barberry, sycamore, aluminium plant/artillery plant and ivy.

Pest plants have a detrimental effect on the reserve. Natural regeneration within the Reserve shall be encouraged through the control of persistent weed species and pest animals.

#### 5.11.6 **Fauna**

The Otatara area supports many endemic forest bird species (e.g. bellbirds (*Anthornis melanura*), tui (*Prothemadera novaeseelandiae*), fantails (*Ripidura fuliginosa*), greywarblers (*Gerygone igata*) and silvereyes (*Zosterops lateralis*)), as well as nationally threatened species (e.g. fern bird (*Bowdleria punctata*), wood pigeons (*Hemiphaga novaeseelandiae*)).

#### 5.11.7 **Amenity Value**

Taiepa Dune Reserve contributes to the significant sand dune and sand plain forest remnants of the Otatara-Sandy Point area that are considered to be nationally important.

The north portion of the Reserve provides expansive open views from the properties that border onto the reserve and for visitors travelling through the park along the formed trails. This area shall be retained for its characteristic sand dune landforms.



The south portion of the reserve provides native forest.

The variation of both open space and native remnant over a geographical variation of undulating and flat land will ensure the likelihood of sustainability of Taiepa Dune Reserve.

### 5.11.8 Recreation

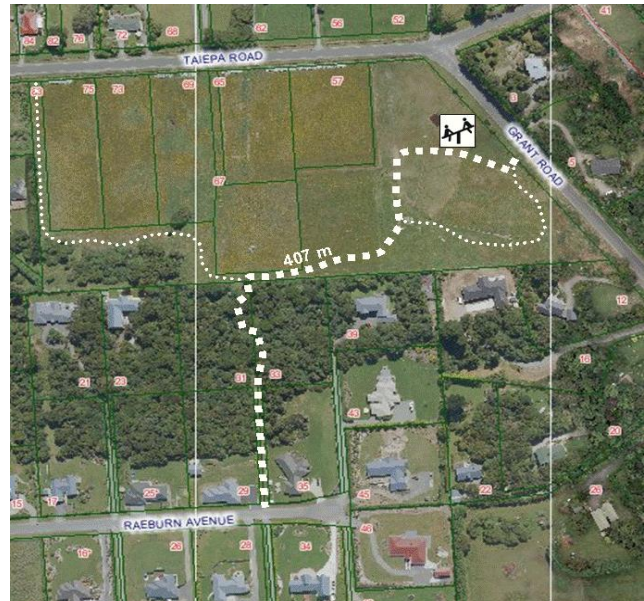
Taiepa Dune Reserve is used as a public area for outdoor recreation. It offers visitors and the Otatara community both a recreational and scenic resource, providing opportunities for picnicking, walking, running and play.

A walking track links Grant Road, Raeburn Avenue and Taiepa Road. The undulating track passes through a remnant of coastal and sand dune forest at the south of the Reserve and grassy clearings in the sand dune landforms at the north of the Reserve.

The south portion of the Reserve is predominately forest remnant and visitors can walk through this section along the formed walkway.

The north portion of the Reserve is predominately grassed area which becomes an open space for public use, enjoyment and recreation at any time.

The playground is situated at the north east area of the reserve by Grant Road. Playground equipment includes: two swings, a seesaw, slide and a module. There is also a swing seat, a park bench and a picnic table at the playground area.



### 5.11.9 Policies

#### 5.11.9.1 Classification

While part of Taiepa Dune Reserve is presently classified as Recreation Reserve, it is foreshadowed that, as a consequence of this Management Plan, application shall be made to the Minister for the area to be classified as a Scenic Reserve.

This would not inhibit public use of the Reserve but would recognise the importance of the preservation of the remnant to the local community.

#### Objectives:

- *To protect, preserve and enhance the intrinsic values of Taiepa Dune Reserve as a sand dune and forest remnant.*

- *To apply to Minister of Conservation to have Taiepa Dune Reserve classified as a Scenic Reserve as defined in Section 19 of the Reserves Act.*

Policies:

- 5.11.9.1.1 Taiepa Dune Reserve shall be managed as a Recreation and Scenic Reserve pursuant to Sections 17 and 19 the Reserves Act 1977.
- 5.11.9.1.2 Council eventually aims to manage all of Taiepa Dune Reserve as a Scenic Reserve pursuant to Section 19 of the Reserves Act 1977. A request will be made to the Minister to have Taiepa Dune Reserve classified as a Scenic Reserve as defined in Section 19 of the Reserves Act 1977.

5.11.9.2 Boundaries and Fencing

Fencing exists around and within the Taiepa Dune Reserve boundaries, including between the north boundary of the area previously known as Raeburn Bush and the narrow mown access strip along Taiepa Dune Reserve.

Fencing consists of fence wire and posts.

Policy:

- 5.11.9.2.1 Rural style fencing at Taiepa Dune Reserve is currently more than adequate for defining boundaries around the Reserve.

## 5.12 TIKORE ISLAND (SCENIC RESERVE)

### 5.12.1 Introduction

Tikore Island has had an interesting past and features in history books of the area from as early as the first settler to Bluff. Highly visible from the State Highway, Tikore Island is a significant landmark in the Bluff Harbour.

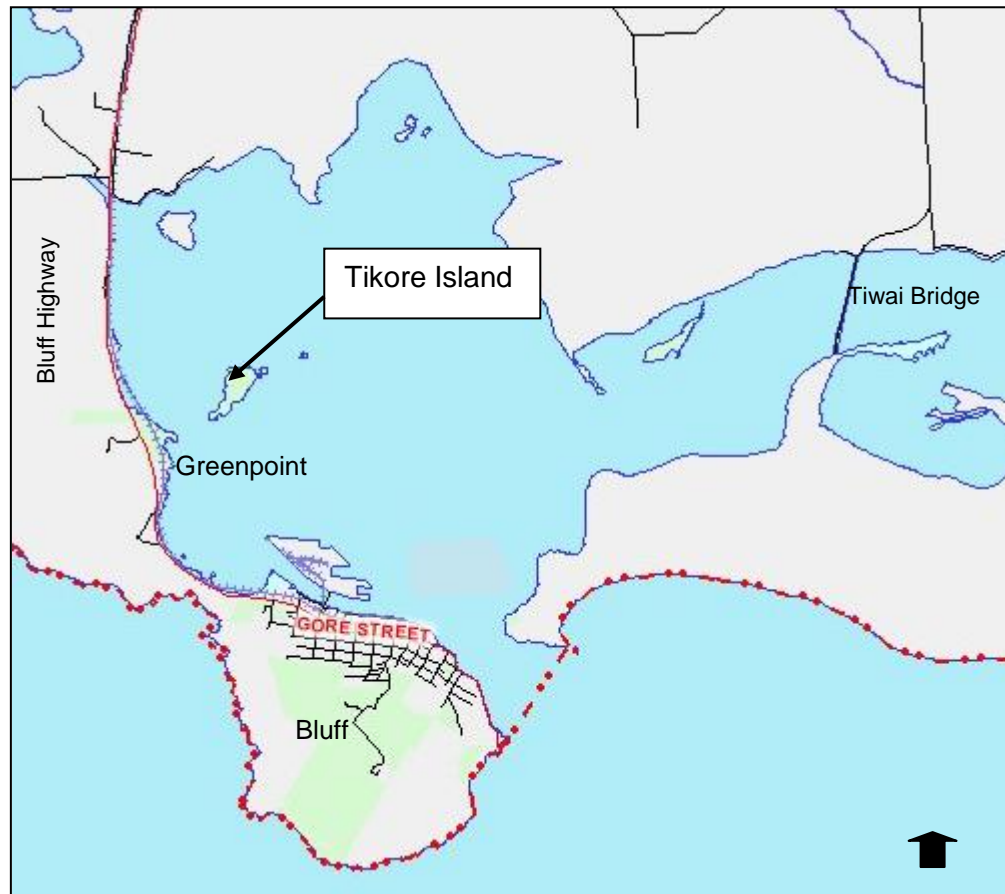
A good place to view Tikore Island is from the Greenpoint Domain walkway. Interpretation signage helps make this area an interesting and inviting area to view.



Aerial of Tikore Island (Flown 2011)

### 5.12.2 Location and Access

Tikore Island is located within Bluff Harbour to the north east of Greenpoint Reserve around 500 metres off shore. Rabbit Island is located to the north east of Tikore Island. Access can only be gained by boat.



Location of Tikore Island

### 5.12.3 History

The name Tikore is probably a corruption of its original Maori names: Te Moutere O Te Kaika Kuri (the island where dog was eaten) and Te Kuri (*from interpretation sign at Greenpoint Reserve*).

Tikore Island has been known by at least two other names in its history.

The earliest mention of Tikore Island occurs in Duperry's Atlas of 1824, which includes a number of French names even though the French never reached New Zealand. These include 'I. du Lin', which is the original European name for Tikore Island (and an indication of the flax here).

The island has also been known as 'Spencer Island', named after James Spencer who was the first European settler on the Southern mainland. Spencer landed at Bluff in January 1824 and his house became the first European house in Southland. He purchased land from the Maori and cleared 60 acres for cultivation of wheat, barley, potatoes and vegetables.

Spencer bought 'Spencer's island' from Chief Tuhawaiki and paid goods to the value of 50 pounds. This is where he kept his pigs.

Today, the waters between Tikore Island and Greenpoint have become a ship's graveyard for retired veterans of Bluffs oyster and fishing fleet. The wrecks are

deteriorating rapidly but a few are clearly visible at low tide (*sourced from the Interpretation sign at Greenpoint Reserve*).

In the Invercargill District Plan (2005) three archaeological sites are identified on or just off Tikore Island in the intertidal zone since they were first recorded in 1969. Since the first recordings, there has been little modification or disturbance observed on Tikore island. Few people visit, including Council staff, for any maintenance work such as plantings (*sourced from Southland Coastal Heritage Inventory Project results, 2010*).

Archaeological sites, including any unrecorded pre-1900 sites, are protected against any disturbance or removal of historical artefacts under section 99 of the Historic Places Act 1993. Permission of the New Zealand Historic Places Trust is required before they can be modified or destroyed.

The sites are described in the Invercargill City Council District Plan (2005) as two 'workshops' and one 'working floor'. The grid references give a single reference point for the sites but they may extend over a larger area.

All three sites are very similar to each other. The stone is a meta-basalt/argillite and it was used for a range of tools, including adzes, and other types of blades.

There are other workshops/working floors around Bluff Harbour that are more extensive, more complex, and demonstrate more concentrated and longer term stone working activity but the Tikore sites are still important as part of the wider picture of stone use.

Tikore Island holds a part of the high quality and well sought after stone resources originally used in Bluff Harbour and Southland by early Maori. Stone sources were gradually exploited and distributed around the South Island and Tikore Island holds some of those still remaining around the Bluff area.

In addition to the three recorded sites, the original records also indicate that there is sign of stone flaking in other locations around the shore line.

Any unrecorded sites above the tide may be impacted by further plantings.

E47/ 23 workshop site on Tikore Island  
(New Zealand Archaeological  
Association)



#### 5.12.4 Tenure

Classification:	<b>Scenic Reserve s.19 (1) (a)</b>
Legal Description:	Tikore Island
Area:	19.0202 hectares
Certificate of Title:	SLA3/434
Subject to:	Reserves Act 1977

#### 5.12.5 Flora

Scrub or tree species have included: coprosma, leptosperma, cythodes, phormium and muehlenbeckia.

A small area in the south-east corner held a little salt marsh development of crassula, plagianthus and leptocarpus.

In 2000, plantings of totara, manuka, cabbage tree, red tussock and broadleaf were carried out. Any further plantings where practical will ensure the viability of the vegetation.

##### 5.12.5.1 Pest Plants

Vegetation on the Island has been modified by past human activities including an annual burn off and intensive grazing from cattle, sheep, goats, rats and rabbits.

Ongoing maintenance and monitoring of pest plants and animals will be required to ensure regeneration can occur naturally. Cutty grass and exotic grasses covering areas previously grazed by rabbits and birds have since grown. Flax and totara have survived well compared with other natives planted in 1996.

#### 5.12.6 Fauna

There is no recorded information on the fauna of Tikore Island. However, there has been bird species noted that occur on most islands along the Bluff coast. As Tikore Island is located near the Bluff coast, it may provide habitat for these species. Bird species in the vicinity of the area and regionally common include:

Scientific Name	Common Name
<i>Ardea novaehollandiae</i>	White faced heron
<i>Haemotopus ostralegus finschii</i>	Pied oyster catcher
<i>Haemotopus unicolour</i>	Variable oystercatcher
<i>Larus bulleri</i>	Black billed gull
<i>Larus dominicus</i>	Southern Black Backed gulls
<i>Larus novaehollandiae scopulinus</i>	Red billed gull
<i>Leucocarbo carunculatus chalconotus</i>	Stewart Island Shag
<i>Pachyptila turtur</i>	Fairy Prion
<i>Pachyptila vittata</i>	Broad-billed Prion
<i>Pelagodroma marina</i>	New Zealand White-faced storm Petrel
<i>Pelecanoides urinatrix</i>	New Zealand Diving Petrel
<i>Pterodroma inexpectata</i>	Mottled Petrel
<i>Puffinus griseus</i>	Sooty Shearwater
<i>Sterna striata</i>	White fronted tern



### 5.12.7 Amenity Value

Tikore Island provides scenic amenity and historical value to the residents of Bluff and Invercargill. These values should be protected as a representation of the environment that would have existed in the past.

This Island is appreciated as a significant landmark in the Bluff Harbour.



View from Greenpoint Recreation Reserve looking north east

### 5.12.8 Recreational Use

Due to accessibility issues, Tikore Island offers minimal recreational opportunities for the residents of the region. The Island is appreciated instead for natural, historical and scenic values. These values take precedence over recreation on the Island.

### 5.12.9 Policy

#### 5.12.9.1 Access Into and Through Reserves

Visitors have restricted access to the Island because the only way to get there is by boat.

The natural, historical and scenic features are the primary purpose of the Reserve.

Camping and trampling over vegetation or potential damage of archaeological sites can damage the Island's values as a Scenic Reserve.

Access to the Reserve needs to be controlled so that conservation values are protected.

#### Policy:

- 5.12.9.1.1 Priority will be given to the protection of the natural resource. No person shall visit the Reserve without prior written authority from Council.



## 5.13 ESPLANADE RESERVES

### 5.13.1 Introduction

Creation of Esplanade Reserves or Strips is generally a condition of subdivision in riverside or foreshore areas since the passing of the Resource Management Act (RMA) 1991.

When land adjacent to the sea, rivers and lakes is subdivided, Sections 229-237 of the RMA requires land to be set aside as either:

- A Local Purpose Reserve to be managed as an Esplanade Reserve under the Reserves Act and administered by the local authority; or
- An Esplanade Strip, whereby the ownership remains with the landholder but public access is usually allowed, subject to conditions (Schedule 10 RMA).

All Esplanade Reserves in this Plan are classified as Local Purpose Reserves and are administered and managed by the Invercargill City Council Parks Division.

Esplanade Reserves and Strips are administered for at least one of the following purposes and these guide their overall management:

- (a) To contribute to the protection of conservation values by, in particular, -
  - (i) Maintaining or enhancing the natural functioning of the adjacent sea, river or lake;
  - (ii) Maintaining or enhancing water quality;
  - (iii) Maintaining or enhancing aquatic habitats;
  - (iv) Protecting the natural values associated with the esplanade or strip;
  - (v) Mitigating natural hazards.
- (b) To enable public access to or along any sea, river or lake.
- (c) To enable public recreational use of the esplanade reserve or esplanade strip and adjacent sea, river or lake where use is compatible with conservation values.

(b) and (c) are more difficult to manage due to the physical restrictions to accessing most of the Esplanade Reserves. Therefore overall management by Council focuses mainly on (a)(i).

Esplanade Reserves are reserves located adjacent to riverside or foreshore areas, most of which prohibit access due to surrounding private land.

Council accepts that public access may not always be compatible with protecting natural values, or may not be physically practical. Therefore public access to some Esplanade Reserves is not encouraged and would require permission from adjoining landowners because they are occupied by those landowners who manage them for grazing and farming purposes.

In some instances Council will be required to gain permission from adjoining landowners in order to access Esplanade Reserves for maintenance.

Most are small and modified, but they complement other areas of ecological significance and collectively make a valuable contribution in terms of providing buffers and restoration opportunities.

Esplanade Reserves are scattered around three ecological districts within the Invercargill City District: Foveaux, Southland Plains and Waituna.

The Foveaux Ecological District comprises of esplanades located in the Bluff area:

- Ocean Beach.
- Stirling Point Pilot Station.

The Southland Plains Ecological District comprises of the flat to gently undulating Southland Plains, formed on Quaternary sediments, with smaller areas of sand dunes and recent alluvial deposits along Waihopai River and Otepunui Creek:

- Liddel Street.
- Beaconsfield Road.
- Forde Road.
- McIvor Road.
- Mersey Street.
- Mill Road.
- Oteramika Road.
- Racecourse Road.
- Short Road.
- Waihopai River.

The Waituna Ecological District includes extensive wetlands and spit-bound lagoons and harbours on Quaternary sediments:

- Colyers Island.

### **5.13.2 History**

Portions of land were vested as Local Purpose Reserves for Esplanade purposes in the 1900's as results of subdivisions under the Resource Management Act 1991. These reserves were set aside to be managed for their conservation values, rather than for public access.

### **5.13.3 Flora**

Esplanade Reserves are situated adjacent to rivers and other waterways. There are no delicate and colourful plants in those areas because the surrounding environments are rural and swampy; most suited for shrubs, grasses, rushes and riparian vegetation.

Eight Esplanade Reserves are located in rural areas where there is farming, three are in the Bluff area by the sea, where vegetation contains coastal scrub and rocky shores, and two are in the residential area of Invercargill.

The Ecological District in which Esplanade Reserves are located may help to give an idea of the similar types of vegetation that may exist.

The **Southland Plains Ecological District** holds lowland red tussock land, swamps (manuka/ flax/*Carex secta*/toetoe, kahikatea-matai/hardwood swamp forest), salt marshes and sand dunes, and alluvial lowlands.

Remnants outside of the urban areas contribute to the rural amenity and are reservoirs of remaining biodiversity.

Original streamside forest, growing on alluvial soils adjoining most of the watercourses across the Southland Plains, would once have lined the Waihopai River and other streams. It is now very rare and demonstrates what forests around Southland used to be like.

Vegetation within the **Waituna Ecological District** comprises of mostly peat swamps, red tussock, seral manuka and flax cushion bogs. Extensive salt marshes fringe the bays and lagoons.

There are underdeveloped lowland forest remnants of podocarp-hardwood (kamahi) forest. There is also sand dune vegetation. Most of the area has been drained and developed for pasture.

**Foveaux Ecological District** consists of mainly coastal scrub and low forest. There are unique species that are typical of the coastal environment, including turf (*Selliera*, *Samolus*, *Plantago*, and *Cotula*), rock crevice plants (*Asplenium obtusatum*, *Myositis rakiura*) and grassland (*Poa astonii*).

Rural, coastal and streamside environments all contain some form of weed or noxious plants such as broom and gorse. Viability of the reserves would be greatly enhanced by carrying out extensive weed control, as negotiated with private landowners to gain access.

Vegetation on some Esplanade Reserves, including Stirling Point Pilot Station Reserve and Waihopai River, have been highly modified and developed over the years.

Modification has involved grazing, pest plants and animals, and human use.

#### 5.13.4 Fauna

There is a variety of fauna living amongst the esplanades, from the Southland Plains rural remnants, to estuary and wetland terrain, all the way down to the coastal shores.

Southland Plains Ecological District has been highly modified for farming. Birds present include: fern bird, marsh crake, banded dotterel, black-fronted dotterel, black-billed gull, South Island pied oystercatcher and spur-winged plover. These birds are located at rivers, gravelled beds and wet areas.

Waituna Ecological District provides the habitat of marshlands and estuaries which are also suitable for wetland birds, such as: fern bird, scaup, shore birds, waders, marsh crake, spotless crake, bittern, black-backed gull, grey teal, grey duck, paradise shelduck and Canada goose.

Bluff and Greenpoint shorelines, where Ocean Beach, Colyers Island and Stirling Point Pilot Station are located, support a thriving wildlife community for coastal, shorebirds, waders and seawater birds.

These include: white-faced heron and Stewart Island shag. Other local birdlife include: New Zealand pigeon, tui, white fronted tern and sooty shearwater.

Visitors may see fur seals and southern right whales like to visit near the coast in the winter. Fish and molluscs are abundant in the nutrient-rich waters.

### **5.13.5 Amenity**

Esplanade Reserves contain cultural, natural and human history values. These values should be protected as a representation of the environment that would have existed in the past.

### **5.13.6 Recreational Use**

There are only few esplanades with recreational use. This is because Esplanade Reserves have resulted from subdivisions, leaving isolated strips of grassland along waterways, of which some are hard to access.

### **5.13.7 Policies**

#### **5.13.7.1 Access Into and Through Reserves**

Due to the locations of the Esplanade Reserves public and physical access will be difficult. There is a lot of private land surrounding the reserves which is fenced and may contain stock. Most of the Reserves are also away from the main roads.

#### *Policy:*

- 5.13.7.1.1 Authorisation from Council and/or landowners of land surrounding Esplanade Reserves will be required before proceeding.

#### **5.13.7.2 Buildings and Structures**

#### *Policy:*

- 5.13.7.2.1 No new structures are anticipated in the future except those required for interpretation or signage. New structures on Esplanade Reserves shall be designed in sympathy with the historical features of the sites.

**5.13.8 Beaconsfield Road Esplanade Reserve (Local Purpose)**



Aerial of Beaconsfield Road Esplanade Reserve (flown 2011)

**5.13.8.1 Location and Access**



Location of Beaconsfield Road Esplanade Reserve

Beaconsfield Road Esplanade Reserve consists of two long parcels of land. They are located on the south side of the Waikiwi Stream in a rural environment at the northern end of the Invercargill District.

The road leading to the Reserve from Beaconsfield Road is unformed road. It is physically restricted to the public and adjoining landowners may fence it for grazing purposes. There is no bridge across the stream. Access for maintenance would be gained through private property to the south of Mclvor Road.

The Council also owns part of the river bed adjoining the reserve. Private land adjoins these reserve strips in all directions.

About half of the Reserve is made of rough grass and cutty grass adjoining the river, along with areas of gorse, thistles and broom. The Reserve also contains a shelter belt of young poplar, willow trees and pasture grasses.

Not a lot can be done with the Reserve due to the high modification of the surrounding land and the Reserve's location.



#### 5.13.8.2 Tenure

Classification:	<b>Local Purpose Reserve - Esplanade</b>
Legal Description:	Lots 3 and 4 DP 13588
Area:	0.7565 hectares
Certificate of Title:	SL11A/215
Subject to:	Reserves Act 1977

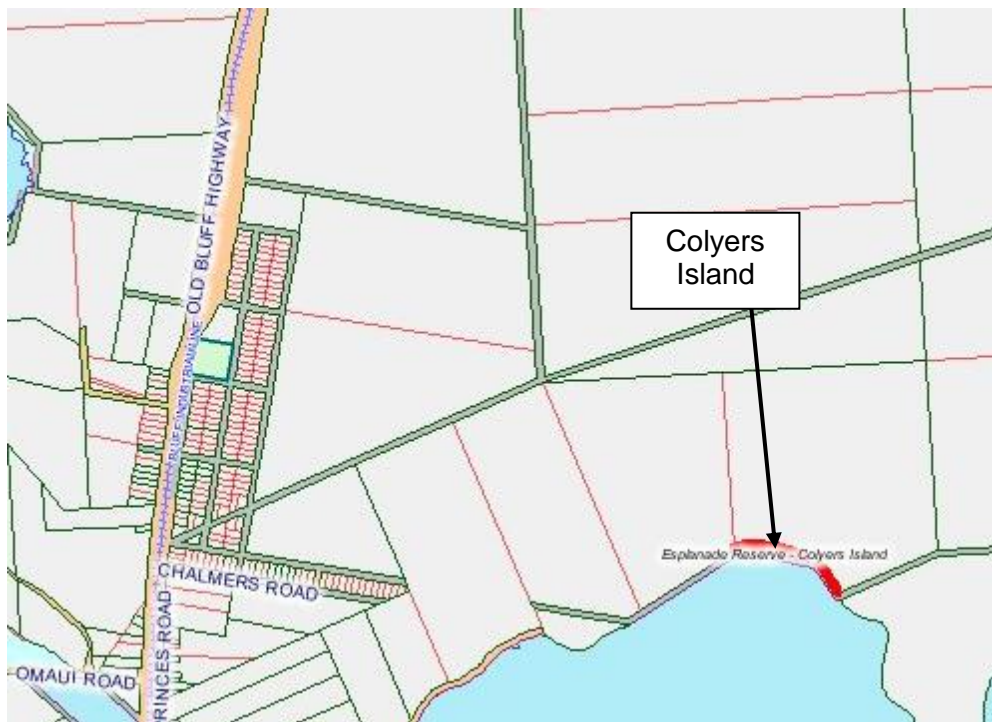


### 5.13.9 *Colyers Island Esplanade Reserve (Local Purpose)*



Aerial of Colyers Island Esplanade Reserve (flown 2011)

#### 5.13.9.1 Location and Access



Location of Colyers Island Esplanade Reserve

Colyers Island Esplanade Reserve is located approximately 14km from Invercargill City on the northern foreshore of Bluff Harbour. It is approximately 2km east of Greenhills community which is on the Bluff Highway.

Farmland adjoins the Reserve inland.

Access is semi restricted. From the end of Colyers Island Road to the east, a private farm track follows the coast, passing through the reserve. Permission is required before accessing the Reserve.



#### 5.13.9.2 Tenure

Classification:	<b>Local Purpose Reserve - Esplanade</b>
Legal Description:	Lots 2 and 3 DP 12887
Area:	0.4650 hectares
Certificate of Title:	5B/204 (Cancelled)
Subject to:	Reserves Act 1977

#### 5.13.9.3 Adjoining Land Use

The northern beaches of Bluff Harbour are important because they were food gathering and fish areas. The beach also forms part of what was a traditional trail along the Southern Coast.

Archaeological sites, including those unrecorded pre-1900 sites, are protected against any disturbance under section 99 of the Historic Places Act 1993.

Permission of the New Zealand Historic Places Trust is required before they can be modified or destroyed.

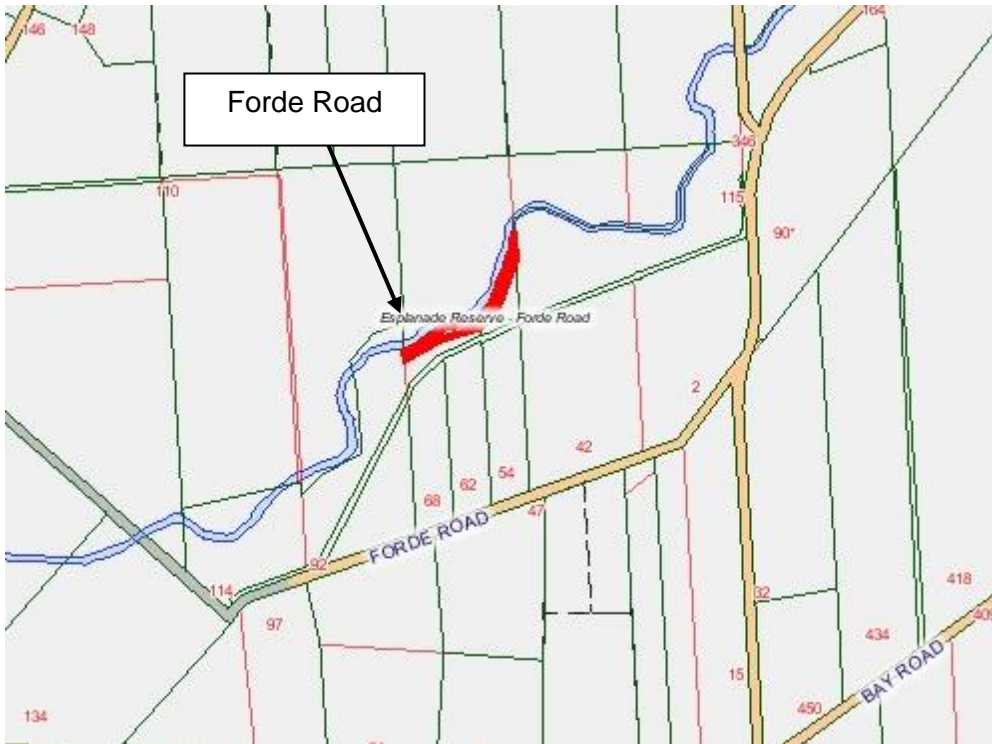
An archaeological site (oven) is located very near the Colyers Island Esplanade Reserve boundaries. What was recorded does not cover a large area.

**5.13.10 Forde Road Esplanade Reserve (Local Purpose)**



Aerial of Forde Road Esplanade Reserve (flown 2011)

**5.13.10.1 Location and Access**



Location of Forde Road Esplanade Reserve

Forde Road Esplanade Reserve is located between the Waikiwi Stream and a stock bank in a rural area on the western side of the Invercargill District in the vicinity of West Plains School Road.

Land surrounding the Reserve is predominantly in private ownership, with Environment Southland owning a portion adjoining the stock bank.

The land is within the Waikiwi channel and is indistinguishable from the surrounding land.

Permission is required before accessing the Reserve.

The predominant vegetation is pasture grasses and rushes. There are a few small willows establishing along the stream margin, along with areas of blackberry and gorse thistles.



#### 5.13.10.2 Tenure

Classification:	<b>Local Purpose Reserve - Esplanade</b>
Legal Description:	Lot 4 DP 4264
Area:	0.6070 hectares
Certificate of Title:	157/82 (Cancelled)
Subject to:	Reserves Act 1977

### 5.13.11 *Liddel Street Esplanade Reserve (Local Purpose)*



Aerial of Liddel Street Esplanade Reserve (flown 2011)

#### 5.13.11.1 Location and Access

Liddel Street Esplanade Reserve comprises two lots adjoining the Otepuni Stream in the enterprise area of the Invercargill District. The parcel of land separating the two lots contains the Otepuni Stream and is owned by the Crown.

The Reserve is visible and accessible from Liddel Street. The south part of the Reserve contains concrete beside the YMCA Charitable Trust. This may deter people from wanting to access Otepuni Stream from that side because it looks like it is part of the Trust's section of land.

The location directly beside the Otepuni Stream indicates that there could be some riparian plantings within the Reserve to make it more appealing. However, rising water levels of the stream need to be considered which could wipe plantings directly beside the stream out.

Plantings of vegetation more suitable to an industrial area up higher at road level would make the Reserve more appealing to pedestrians and people driving past.



Location of Liddel Street Esplanade Reserve



#### 5.13.11.2 Tenure

Classification:	<b>Local Purpose Reserve - Esplanade</b>
Legal Description:	Lots 5 and 6 DP 13476
Area:	0.0693 hectares
Certificate of Title:	SL10D/671
Subject to:	Reserves Act 1977

### 5.13.12 *Mclvor Road Esplanade Reserve (Local Purpose)*



Aerial of Mclvor Road Esplanade Reserve (flown 2011)

#### 5.13.12.1 Location and Access



Location of Mclvor Road Esplanade Reserve

Mclvor Road Esplanade Reserve is located alongside the Waikiwi Stream in a rural area at the northern end of the Invercargill District.

Lot 2 (435m<sup>2</sup>) is situated between Lots 3 and 4 and is recognised as being vested as a stream bed by the Council under section 237A of the Resource Management Act 1991.

The waterway is cleared and maintained by the Regional Council.

Flora includes grass and rush species, as well as many pest plants. Some of these pest plants are spread from the clearance of the waterway and so should be considered.

Ducks and fish have been seen in the stream.

Private rural land adjoins to all directions of the reserve. The road leading towards the direction of the Reserve is a private road which restricts public access. Permission would be required by landowners before accessing the Reserve.



#### 5.13.12.2 Tenure

Classification:	<b>Local Purpose Reserve - Esplanade</b>
Legal Description:	Lots 3 and 4 DP 13301
Area:	0.2933 hectares
Certificate of Title:	SL10D/43
Subject to:	Reserves Act 1977

#### 5.13.12.3 Adjoining Land use

The fence along the northern boundary crosses onto the reserve. If the Invercargill City Council requires that land in the future then the private landowner adjoining the Reserve can put the fence at the southern end of the boundary.



### 5.13.13 *Mersey Street Esplanade Reserve (Local Purpose)*



Aerial of Mersey Street Esplanade Reserve (flown 2011)

#### 5.13.13.1 Location and Access

Mersey Street Esplanade Reserve is located off Mersey Street alongside the Otepunu Stream in an industrial area of the Invercargill District. The Reserve is both visible and accessible to the public from Mersey Street.

Crown land adjoins to the south of the Reserve and private land adjoins to the north and east. The Reserve fronts onto roading to the west.

Features of this Reserve include weeds and grass species. The viability of the Reserve could be improved if there was the continuation of maintenance and some riparian vegetation planted along this wide strip of land.



Location of Mersey Street Esplanade Reserve



5.13.13.2 Tenure

Classification:	<b>Local Purpose Reserve - Esplanade</b>
Legal Description:	Lot 3 DP 13743
Area:	0.0789 hectares
Certificate of Title:	SL11A/784
Subject to:	Reserves Act 1977

**5.13.14 Mill Road Esplanade Reserve (Local Purpose)**



Aerial of Mill Road Esplanade Reserve (flown 2011)



Aerial of Mill Road Esplanade Reserve (flown 2011)



Aerial of Mill Road Esplanade Reserve (flown 2011)



Aerial of Mill Road Esplanade Reserve (flown 2011)

### 5.13.14.1 Location and Access



Location of Mill Road Esplanade Reserve

Four parcels of Mill Road Esplanade Reserves are located alongside the Waihopai River in a rural environment at the north end of the Invercargill District.

Private rural land adjoins to the north and south of these four strips.

Riparian vegetation and grass species exist along and around the water edge.

There are no formed roads leading to the reserve, making physical access difficult. Permission will be required from private landowners to access this Reserve.

### 5.13.14.2 Tenure

Classification:	<b>Local Purpose Reserve - Esplanade</b>
Legal Description:	Lots 4-7 DP 7143
Area:	0.6643 hectares
Certificate of Title:	136/283 (Cancelled), 127/98 (Cancelled)
Subject to:	Reserves Act 1977

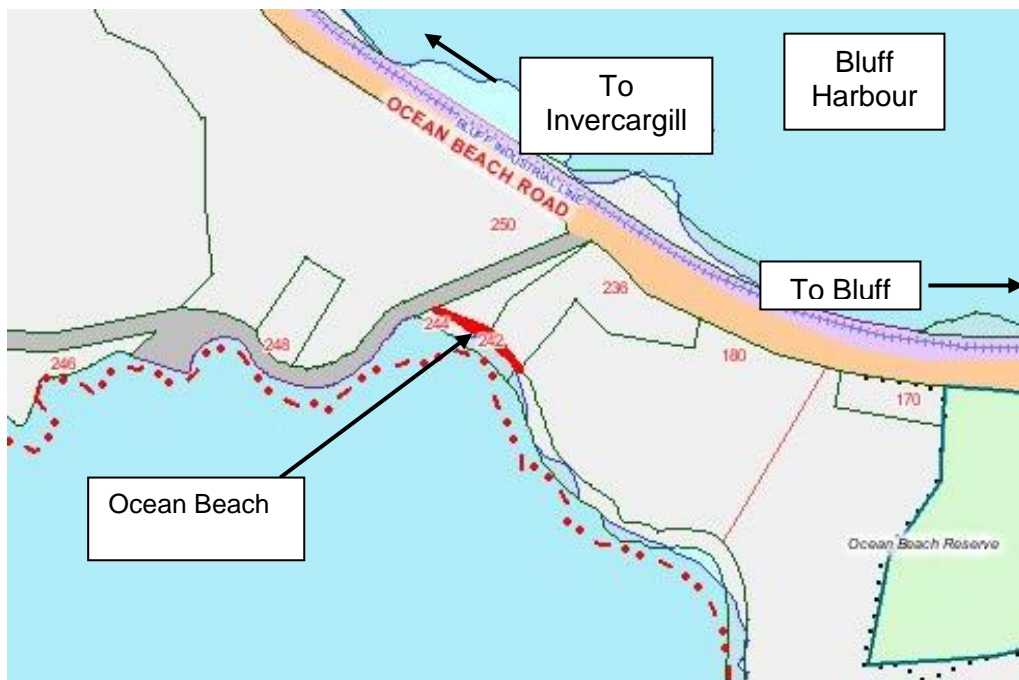


**5.13.15 Ocean Beach Esplanade Reserve (Local Purpose)**



Aerial of Ocean Beach Esplanade Reserve (flown 2011)

**5.13.15.1 Location and Access**



Location of Ocean Beach Esplanade Reserve

Ocean Beach Esplanade Reserve adjoins the coastal shore of Foveaux Strait at the southern end of the Invercargill District. A partly formed road off Ocean Beach Road leads towards the Reserve making legal access possible. Department of Conservation land adjoins to the south, private land adjoins to the north and Ocean Beach Road is to the west. No. 1 Ward Parade adjoins to the east of the Reserve and is also administered by the Council.

#### 5.13.15.2 Tenure

Classification:	<b>Local Purpose Reserve - Esplanade</b>
Legal Description:	Lot 2 DP 13440
Area:	0.0420 hectares
Certificate of Title:	SL10D/207
Subject to:	Reserves Act 1977

#### 5.13.15.3 History

Te Awa Rakau is the bay over which the Esplanade looks.

Te Ara a Kiwa is the original Maori name for Foveaux Strait. This remembers the legend of the whale Kewa who chewed through the sandbank that once existed between Rakiura and Murihiku. Ngai Tahu under Te Wera lived in this area. Some of his descendents still live in Bluff.



The area was rich in resources both from the coast and the land.

More recently, the Esplanade was used as a car park for the Ocean Beach Freezing Works until its closure in 1991.

#### 5.13.15.4 Archaeological Sites

Archaeological sites, including those unrecorded pre-1900 sites, are protected against any disturbance under section 99 of the Historic Places Act 1993.

Permission of the New Zealand Historic Places Trust is required before they can be modified or destroyed.

Location of an archaeological site is very near the southern boundary of the Ocean Beach Esplanade Reserve, on the narrowest part of promontory, above the high water mark.

This site is a find spot for dark green argillite adze. Duff type 2 B. It is found together with roughout in cleft in rock.

Adze has matt polish on front and back. It has a quadrangular cross section, with flaking and hammer-dressing on sides and front.



There is nothing on site now but there may be sites nearby that are not recorded because they are not visible (sourced from New Zealand Archaeological Association Records 11 January 2011).

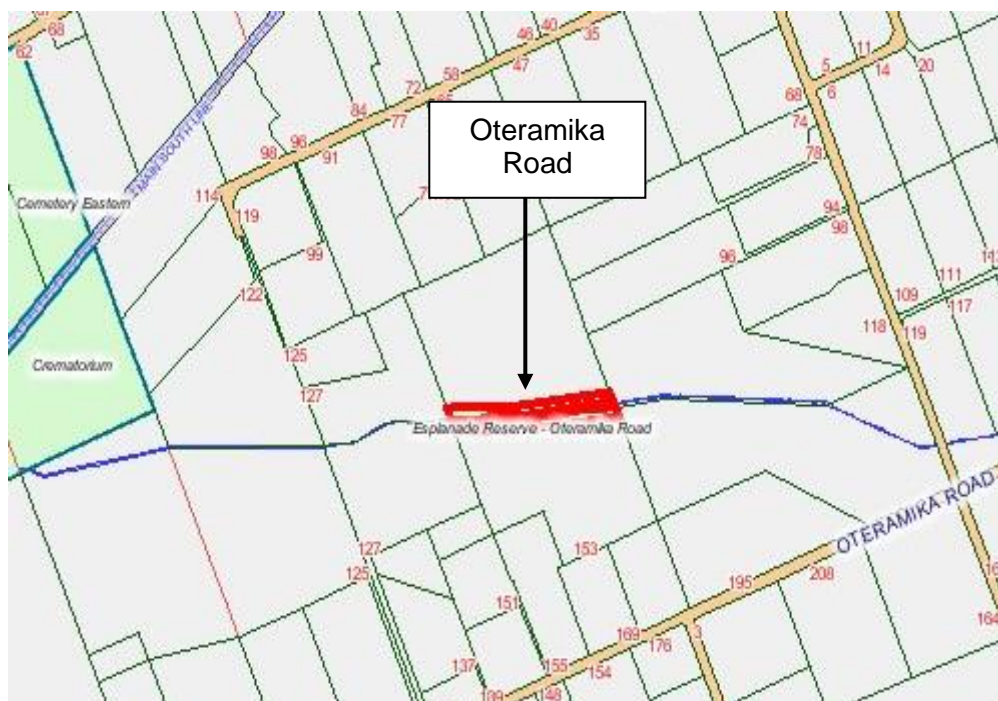


### 5.13.16 Oteramika Road Esplanade Reserve (Local Purpose)



Aerial of Oteramika Road Esplanade Reserve (flown 2011)

#### 5.13.16.1 Location and Access



Location of Oteramika Road Esplanade Reserve

Oteramika Road Esplanade Reserve is located alongside the Otepuni Creek in a rural environment on the eastern side of the Invercargill District. Otepuni Creek is managed for river control purposes by Environment Southland.

Southland Regional Council adjoins to all directions of the reserve. Physical access would be difficult as there are no roads leading directly to the Reserve and it is amongst a private rural environment. Permission will be required from landowners to access the reserve.

### 5.13.16.2 Tenure

Classification:	<b>Local Purpose Reserve - Esplanade</b>
Legal Description:	Lots 4 and 6 DP 12993
Area:	1.2860 hectares
Certificate of Title:	SL10C/331
Subject to:	Reserves Act 1977

**5.13.17 Racecourse Road Esplanade Reserve (Local Purpose)**



Aerial of Racecourse Road Esplanade Reserve (flown 2011)

**5.13.17.1 Location and Access**



Location of Racecourse Road Esplanade Reserve

Racecourse Road Esplanade Reserve is located along the channel of the Waihopai River in a rural environment near the residential area of Racecourse Road. The Reserve is situated on the eastern side of the Invercargill District.

Pedestrian access to the Reserve can be gained from the end of Racecourse Road and Waihopai Walkway, which continues along a stop bank.

All land adjoining the channel is managed by Environment Southland (Southland Regional Council) and maintained for river control and flood protection purposes.

The Reserve is visible from the Waihopai Walkway but it is also indistinguishable from the surrounding landscape.

A streambed separates the two portions of reserve. Southland Regional Council adjoins to the north and there is roading to the west, east and south of the reserve, which separates the Southland Regional Council land.

Vegetation consists of pasture grass species which is maintained by the grazing of sheep. Parts of the Waihopai Walkway have low fencing along the stop bank to enable grazing of the channel.



#### 5.13.17.2 Tenure

Classification:	<b>Local Purpose Reserve - Esplanade</b>
Legal Description:	Lots 5 and 6 DP 12822
Area:	0.4240 hectares
Certificate of Title:	SL10C/727
Subject to:	Reserves Act 1977

### 5.13.18 *Short Road Esplanade Reserve (Local Purpose)*



Aerial of Short Road Esplanade Reserve (flown 2011)

#### 5.13.18.1 Location and Access



Location of Short Road Esplanade Reserve

Short Road Esplanade Reserve is located off an unformed road next to the Waikiwi Stream in a rural environment on the western side of the Invercargill District.

Private land adjoins the strip to the west, south and north. Land to the east is administered by roading.

Permission would be required from landowners to access the Reserve. Vegetation consists of grass species.

### 5.13.18.2 Tenure

Classification:	<b>Local Purpose Reserve - Esplanade</b>
Legal Description:	Lot 2 DP 12881
Area:	0.8900 hectares
Certificate of Title:	SL9D/188 (Cancelled)
Subject to:	Reserves Act 1977



**5.13.19 Stirling Point Pilot Station Esplanade Reserve (Local Purpose)**



Aerial of Stirling Point Pilot Station Esplanade Reserve (flown 2011)

### 5.13.19.1 Location

The Stirling Point Pilot Station Reserve is located at the start of State Highway 1, in Bluff.

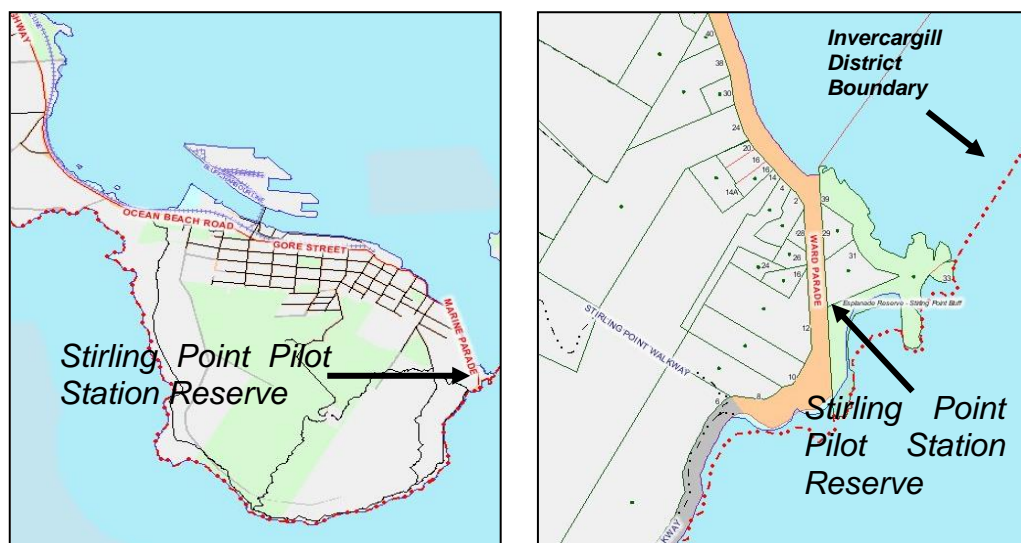
The Reserve is adjacent to the Stirling Point car park, a popular place from which to view Foveaux Strait, Stewart Island and the boating activities centred on the Bluff Harbour entrance. This outlook is also the natural backdrop for many tourists' photo of themselves and the famous Stirling Point Signpost.

Stirling Point Pilot Station Reserve is a long, narrow, irregular shaped reserve that follows the foreshore around Stirling Point.

The north eastern and south eastern boundaries follow the rocky shoreline at the high water mark. Other boundaries are formed by the two residential properties, and State Highway 1 (Ward Parade). The Invercargill District boundary line forms part of the Reserve boundary.

Stirling Point forms the entrance point to the Bluff Harbour from Foveaux Strait and is located to the very east of the Bluff peninsular.

Located on legal road line, this Reserve is maintained by the Parks Division but does not form part of the Stirling Point Pilot Station Reserve.



Location of Stirling point Pilot Station Esplanade Reserve

### 5.13.19.2 Reserve Description

Stirling Point is best known for the distinctive Signal Station building, located right on the point. The white building with the red lantern creates a unique landscape feature set against a backdrop of the blue or grey sea and sky. The building and associated structures have historical importance to Bluff, as the site of an early whaling station established in 1836, and the first pilot station for Bluff established in 1856.

The Signal Station is owned by South Port, which also leases the land immediately surrounding the building. The historical and landscape features of the Point directly influence the management of the remainder of the Reserve.

The Signal Station is the reason many people visit the Stirling Point Pilot Station Reserve.

Apart from those structures associated with the Signal Station, the few built structures on the remainder of the Reserve are mainly linked to the roadway and car park. A small area of the Reserve around the car park is mown, and a narrow grassed track leads you to the south-eastern arm of the Reserve.



Looking south from car park

The reserve is located at the foot of Bluff Hill, significant for its historical, cultural, landscape and environmental values.

In 2004, the Stirling Point Signal Station Preservation Trust prepared a report on the Stirling Point Signal Station. The report included a brief historical background to the site as well as identifying its heritage significance:

The Stirling Point Signal Station has heritage significance for the following reasons (*Gillies; 2004*);

- *Historical Significance*
  - Bluff was the earliest European settlement in New Zealand, established by James Spencer in 1824 when he set up a supply station for the whalers.
  - The pilot station is built on the site of very early activity related to the maritime history of New Zealand, including one of the first whaling stations in New Zealand in 1836 and the first pilot station for the harbour of Bluff in 1856.
- *Technical Significance*
  - The building is a representation of maritime technology which is no longer in use. Since the universal adoption of VHF radios, the system of communication between ships in the harbour or out at sea and the pilot by means of flags has been superseded and the building has become redundant.
  - It is an uncommon building and has rarity value.
  - The Signal Station is an example of an early reinforced concrete building.
- *Social Significance*
  - The Pilot Station was critical to the safe functioning of the harbour. This included both the visiting ships and the local fleet. As such it fulfilled a critical role and allowed the harbour to thrive.
- *Aesthetic Significance*
  - The Signal Station is an important element in the dramatic landscape at Stirling Point, extending from the narrow harbour entrance, the tourist signpost at the southern most point of State Highway 1 and the view over the Foveaux Strait. It provides a dramatic contrast between a man-made element and the often wild forces of the sea. The contrast of white walls

and red tower against the blue or grey sea and sky is particularly impressive.

- The building is largely in its original architectural form and this is a well proportioned octagonal tower with carefully designed detailing.

### 5.13.19.3 Access

Stirling Point Pilot Station Reserve is surrounded by either: steep embankments, rocky beach or residential properties.

Formed vehicle access into the reserve is via a narrow gravelled road off Ward Parade. This road runs over a portion of the neighbour's land and legal right of way has been granted.

Council has a shared maintenance agreement with South Port NZ Ltd and the property owner over this access way. The access road into the Reserve also serves as vehicular access to the residences that neighbour the Reserve at 29 and 31 Ward Parade.

A public car park is located at the end of the drive, providing space for a turning circle and around eight parked vehicles. The car park receives considerable use by people sightseeing, people accessing the beach, fishermen and divers.

Recent developments to the car park have formalised the layout of the car park reducing congestion in the area and damage to the surrounding environment.

A formed pedestrian access links the Pilot Station to Stirling Point toilets and provides views looking back to the Pilot Station and Foveaux Strait.

Other informal tracks provide access to the beach and rocks but can be subject to erosion.

The neighbouring Foveaux Walkway is one of the most popular walking or tramping tracks in the southern part of the Southland region receiving thousands of visitors per year.

While the land surrounding the Signal Station is leased, the public can still gain access to the area. Pedestrian access to the Signal Station building is over a timber bridge with a timber handrail to one side.

The Signal Station building is closed to the public. The building now houses the light used as a navigational aid for the harbour, and equipment for satellite navigation and its associated aerial.



### 5.13.19.4 History

The Stirling Point Pilot Station Reserve is the site of one of the first whaling stations at Bluff, established in 1836. William Stirling set up a whaling station at

what is now known as Stirling Point for Johnny Jones. This was located in a small cove to the north of the present Signal Station and included a house, a boat shed and a store house for the whale oil.

The harbour at Bluff had been recognised from an early stage by European sailors as a valuable and welcome refuge from the storms of the Southern New Zealand coast. Its entrance, however, was dangerous with extremely strong rips, tidal currents and narrow access channels.

In 1856 the first pilot was appointed. This was James Smith. Stirling had died in 1851 and the old whaling station at Stirling Point was selected as the launching site for the pilot boat. Smith married Stirling's widow Mary.

In 1862 a signal station was erected, comprising a timber mast with cross tee and watchman's hut on the summit of Bluff Hill, and a similar mast and cross tee on the rocks beside the pilot boat's slipway.

The watchman on the hill would keep lookout for ships out at sea and communicate with them and the pilot boat by means of different flags. The west yardarm was for vessels out at sea, while the east yardarm was for signalling ships already in port.

Other flags were raised indicating the quarters of the tide. A light was fixed to the top of the mast for access of ships to the harbour after dark.

This system proved to have difficulties in that the top signal station was frequently obscured by low cloud or rain rendering the entire arrangement useless.

In 1865, a lighthouse was erected on Dog Island in response to the ten shipwrecks in the vicinity of Bluff Harbour since 1845. This was designed by the marine engineer, J M Balfour and is the tallest lighthouse in New Zealand. Balfour was extremely innovative and was responsible for most of the new lighthouses built in New Zealand at this time.

In 1912, the signal stations were upgraded. New concrete buildings were erected; one replacing the timber hut on Bluff Hill and one adjacent to the lower mast at sea level. The building on Bluff Hill was rectangular and approximately three metres by two metres. The lower building was octagonal and approximately six metres across and was manned by between two and four men. The watchman in the Bluff Hill station would signal to the pilot in the station at Stirling Point by means of signal flags on the signal mast and the pilot boat would be launched. The boat was a small wooden dinghy and it was rowed out to the waiting ship where the pilot climbed aboard to bring the ship safely to harbour.

The Bluff Hill station was closed down in 1938, re-opening for the duration of World War II, but was not used in peacetime again. It was demolished in 1964.

In 1986, the signal station closed down completely following the advent of UHF radio and satellite communication, and communication between pilots and shipping is centrally located in the South Port offices.

The building now houses the light used as a navigational aid for the harbour and equipment for satellite navigation and its associated aerial.

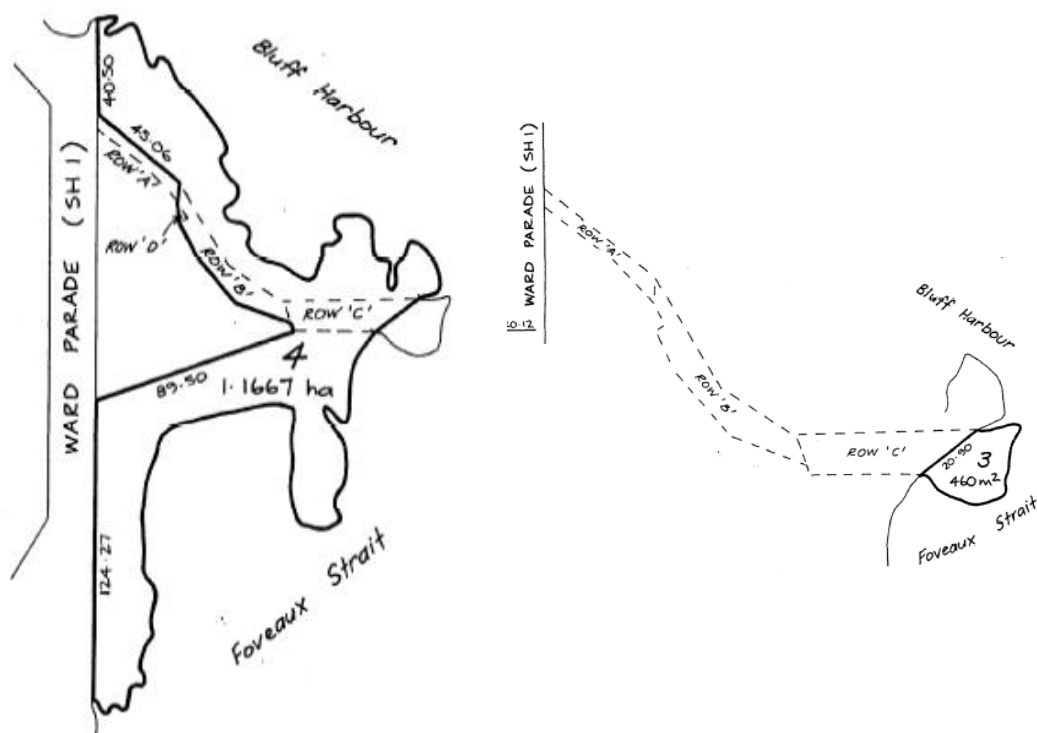
The remains of shipwrecks off Stirling Point include 'Scotia' (1864), 'Pelham' and 'Maid of Otago' (1886) and Okta (1913). There have also been other shipwrecks in the area.

#### 5.13.19.5 Tenure

Classification:	<b>Local Purpose Reserve - Esplanade</b>
Legal Description:	Lots 3 and 4 DP 12793
Area:	1.2127 hectares
Certificate of Title:	SL10B/443, SL10B/444
Subject to:	Reserves Act 1977
	Lease: 199636

Lot 3 Deposited Plan 12793 vested in Invercargill City Council as Local Purpose Reserve (Esplanade) - 0.0460 ha. Stirling Point was leased to South Port New Zealand Limited for a term of 21 years, commencing on 1 January 1992, with a right of renewal. This land contains the Signal Station.

Rights of Way are granted over areas marked A, B, C and D to allow access to Lots 2, 3 and 4 DP 12793. Refer Transfer 199636.6 and Certificate of Titles 10B/441, 10B/442, 10B/443, 10B/444 for details. Costs for construction and maintenance of the Right of Way is split between Lots 1, 2 and 4 DP 12793



#### 5.13.19.6 Amenity

Stirling Point Pilot Station Reserve has been a whaling station, pilot station and signal station. Despite this, the Reserve is located within an important coastal environment and the nearby Bluff Hill contains significant scenic and environmental values.

### 5.13.19.7 Present Management

The Signal Station is owned by South Port which also leases the land immediately surrounding the building. Responsibility for maintenance and restoration of the Signal Station building and associated structures lies with the Lessee and in 2001 the Stirling Point Signal Station Preservation Trust in 2001 was established to undertake this.

### 5.13.19.8 Policies

#### 5.13.19.8.1 *Buildings and structures*

The Stirling Point Pilot Station Reserve has important heritage significance and landscape values requiring protection and recognition.

The Stirling Point site was one of the first whaling stations at Bluff established in 1836, and the existing Signal Station sits near the original launching site for the pilot boat established in 1856. The Signal Station building, with its white walls and red tower, contributes to the dramatic scenery of Stirling Point when viewed against the blue or grey sea and sky.

#### Policy:

5.13.19.8.1.1 The Signal Station and those structures and features of the reserve identified as being historically significant shall be protected and/or restored to the level outlined in the report - Stirling Point Signal Station, Condition Report and Works Specification, 2004 and with approval and/or input from Council. This level is based on the Statement of Significance within that report, and the philosophy outlined in the NZ ICOMOS Charter for the Conservation of Places of Cultural Heritage Value.

#### 5.13.19.8.2 *Leases*

Leases on reserves allow organisations to provide recreational facilities for the public. The Reserves Act 1977 clearly indicates that leases and other occupational rights must be considered in relation to the primary purpose of the reserve and the rights of the public.

Lot 3 DP 12793, containing the Stirling Point Signal Station building, is leased to South Port New Zealand for a term of twenty-one years commencing on 1 January 1992. The lease is for the purpose of protecting the Signal Station, which houses the receiving equipment for the satellite navigation system and the harbour light. Responsibility for maintenance and restoration of the building and associated structures was transferred to the Stirling Point Signal Station Preservation Trust in 2001.

While not specifically identified in the lease agreement, the land surrounding the Signal Station building, which is a local purpose reserve, shall remain available to the public for recreational purposes.

#### Policies:

5.13.19.8.2.1 Lot 3 DP 12793 of the Stirling Point Pilot Station Reserve, containing the Signal Station building, shall be leased to South Port New Zealand Limited for a period of twenty one years commencing 1 January 1992.

5.13.19.8.2.2 Public access to the Stirling Point Pilot Station Reserve land surrounding the Signal Station shall remain available to the public for recreational purposes.

5.13.19.8.2.3 Responsibility for maintenance and restoration of the building and associated structures on Lot 3, DP 12793 lies with the lessee or their appointed agent.

#### 5.13.19.8.3 *Administration*

The Stirling Point Pilot Station Reserve is a reserve vested in Council for esplanade reserve purposes.

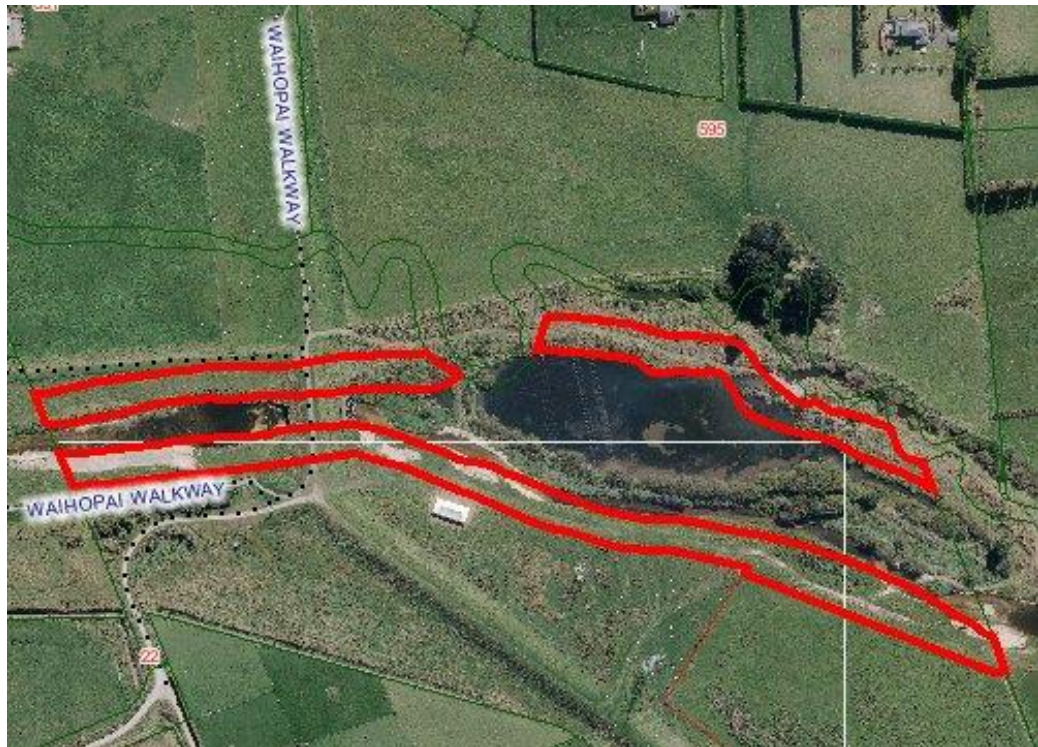
A portion of the Stirling Point Pilot Station Reserve is leased to South Port New Zealand Ltd and management of the Signal Station has been transferred to the Stirling Point Signal Station Preservation Trust.

#### *Policy:*

5.13.19.8.3.1 South Port New Zealand Limited and the Stirling Point Signal Station Preservation Trust are responsible for the maintenance and restoration of the Signal Station Building and associated structures during the term of the lease.

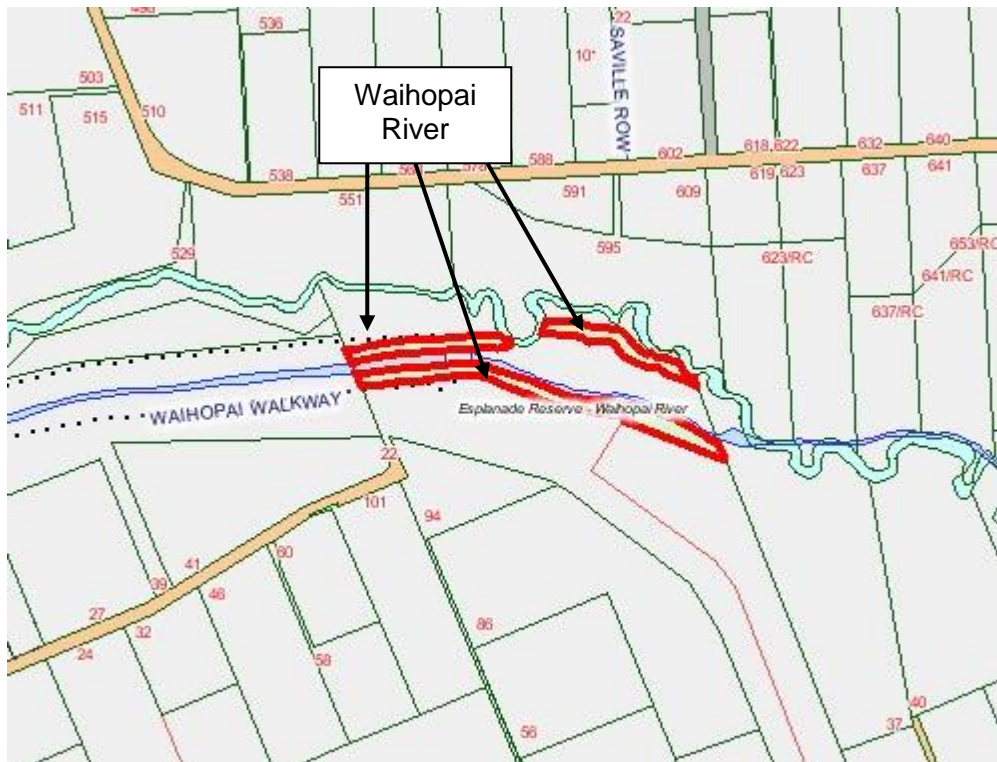


**5.13.20 Waihopai River Esplanade Reserve (Local Purpose)**



Aerial of Waihopai River Esplanade Reserve (flown 2011)

**5.13.20.1 Location and Access**



Location of Waihopai River Esplanade Reserve

Three Waihopai River Esplanade Reserve parcels are located alongside part of the Waihopai River channel in a rural environment near the Waihopai Dam.

Pedestrian access to the Reserve can be gained from the end of Racecourse Road and Waihopai Walkway, which continues along a stop bank. Auburn Road (off Racecourse Road) leads to a closed gate where pedestrians can access the formed pathway to the Waihopai Walkway.

The Waihopai Walkway follows both stop banks towards and across the dam, crossing the Reserve. The public can access the Reserve as there are no restrictions if walking or cycling along the track.

The majority of the Reserve is in pasture grasses and is indistinguishable from the river environs. Areas east of the dam in the vicinity of the ponding area have been planted in riparian species. Vegetation includes: flax, red tussock, cabbage trees, carex sp., toetoe, olearia and broom.

Private land is situated between the three reserve strips. Southland Regional Council owns the remainder of the surrounding land and manages the entire area for flood protection purposes. All areas are grazed periodically.



#### 5.13.20.2 Tenure

Classification:	<b>Local Purpose Reserve - Esplanade</b>
Legal Description:	Lots 6, 8 and 9 DP 12882
Area:	2.2900 hectares
Certificate of Title:	SL10C/272
Subject to:	Reserves Act 1977