

# Protecting our environment

## Native fish, plants, shrubs and trees

During the project more than 3,500 native fish (including long fin and short fin eels, giant bully and inanga) were rescued and relocated to other parts of the waterway.

Where the bypass passes over waterways (Horrell Drain and Darroch Street Drain), culverts have been designed to allow fish passage and riparian planting has been restored with native species.

Around 130,000 plants, shrubs and trees have been planted along the project. Most of these are grown from seeds and cuttings sourced from native plants in the Canterbury area.



## Bird watching

A number of bird species, including the South Island pied oystercatcher, mallard duck and the spur-winged plover have been nesting within the bypass alignment during construction. Where possible, the team worked around the birds, protecting them until their eggs hatched and the families could be relocated to a safer spot.

### South Island pied oystercatcher *Haematopus finschi* ▼

- Also known as New Zealand pied oystercatcher, Finsch's oystercatcher, tōrea, torea, SIPO, South Island oystercatcher
- Endemic native species
- Seen on an embankment near the Groyne Drive bridge

**CONSERVATION STATUS: DECLINING**



### Spur-winged plover *Vanellus miles* ▼

- Also known as masked lapwing, masked plover, spur-wing, spurwinged plover, spur winged plover
- NZ native species
- Seen nesting on the bypass median strip.

**CONSERVATION STATUS: NOT THREATENED**



### ◀ Mallard *Anas platyrhynchos*

- Also known as mallard duck, wild duck, northern mallard, greenhead.
- Seen on the banks of a drain within the project

**CONSERVATION STATUS: INTRODUCED AND NATURALISED**



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## Minimising environmental impact has been a key focus for the Western Belfast Bypass project team.

We have worked closely with Environment Canterbury to ensure all standards are met. Careful consideration has been given to surrounding areas such as The Groynes, neighbouring Otukaikino Wetland, residential areas, and the wider community.

Detailed pre-planning and identification of high risk construction effects was carried out to ensure the protection of the environment during construction and once the bypass opens.

## Erosion and sediment control

During construction there has been significant rainfall events. It was important that none of these events caused silt from the project to enter into nearby waterways.

Various types and sizes of sediment control systems were used, depending on the catchment area including containment and perimeter bunds, soaking ponds, silt fences and stabilised access ways.

## Dust control

Dust was managed in several different ways during construction:

- the ground was watered using water carts
- irrigation systems were installed in some areas
- dust prevention layers such as aggregate, mulch or hydro-seeding (grass), and dust suppressants were used.



Water truck fill station



Silt fences are used to limit silt from entering the surrounding waterways



Water carts watering exposed ground



A dust suppressant is sprayed on to exposed dirt and sand, as it dries it forms a crust



Water truck for dust mitigation