



# Regional Fish Habitat Initiative

## Annual Report 2017-2018

Partners from across the region, including landowners, community groups, the Department of Conservation and Environment Canterbury, come together to work on the Regional Fish Habitat Initiative. This initiative provides a coordinated regionwide approach to identifying, prioritising and remediating fish habitats. The work contributes to the Canterbury Water Management Strategy and zone committee targets for ecological health in Canterbury rivers, including an increase in the distribution and abundance of fish species. The Regional Committee has a focus on tuna/longfin eels, and fish passage.

### Key Achievements for this Year

#### **Completion of the Ashley River Mouth Īnanga Enhancement Project**

This two-year project involved remediation of a ford to enable fish passage and works to enhance the Queens wetland area by clearing willows and planting native wetland species. Works were also undertaken in the Pegasus Bay area of the site to deepen ponds, connect channels and enhance fish habitats with the planting of grasses suitable for Īnanga spawning. Ongoing maintenance will be undertaken by the Parks and Forests Team.

The project was jointly funded by the Regional Fish Habitat Initiative (\$25,960) and Environment Canterbury's Regional Parks (\$28,392), with in kind contributions from the Working Waters Trust.

#### **Completion of two Canterbury Mudfish projects**

This included fencing off waterways to protect habitats and enhancement of habitats through the removal of willows and planting of riparian margins with suitable native species:

- Taiko Stream Mudfish Habitat Project
- Sandown Mudfish Protection Project

#### **Funding of new projects**

This includes:

- The Haldon Pastures Trout Barrier Project for the protection of Canterbury mudfish
- Two projects in Grasmere, which include fencing off a nine-hectare area of wetland and springs, and removal of willows along Grasmere Stream along with restoration planting to improve habitat for native fish species including tuna/longfin eels.



Fish spawning signs installed.



North French Farm Bay Stream.

## Summer student supports fish habitat work

Megan Brown, a student from the University of Canterbury, assisted with the Regional Fish Habitat Initiative over summer. Prior to the inanga spawning season, Megan installed signs at spawning sites to help protect the riparian vegetation which inanga utilise for spawning. Megan also worked alongside a summer student from the Department of Conservation to test a new app for assessing instream barriers to fish passage. The app is being developed by the National Institute of Water and Atmospheric Research as part of new national protocol. The team tested the app out on Banks Peninsula waterways and identified more than 50 potential barriers.

## Haldon Pastures mudfish protection

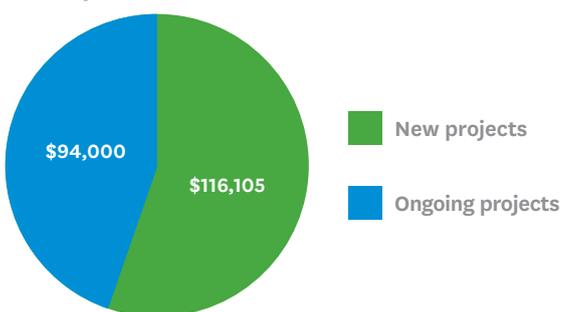
The Haldon Pastures Fish Barrier Project is a partnership between several funders including the Regional Fish Habitat Initiative, Selwyn Waihora Zone Committee, the Department of Conservation and landowners.

Located along Bealeys Stream, a tributary of the Hororata River, the site is a significant habitat area of the nationally threatened Canterbury mudfish. The aim of the project is to protect and future-proof this key stronghold of Canterbury mudfish by removing trout from the site and installing a solar-powered electric trout barrier. The barrier is selective, preventing trout from reaching the mudfish habitat but allowing for the downstream passage of mudfish into the lower reaches. The project will result in a 10-fold increase in mudfish habitat area, which could then function as a save nursery for future projects.

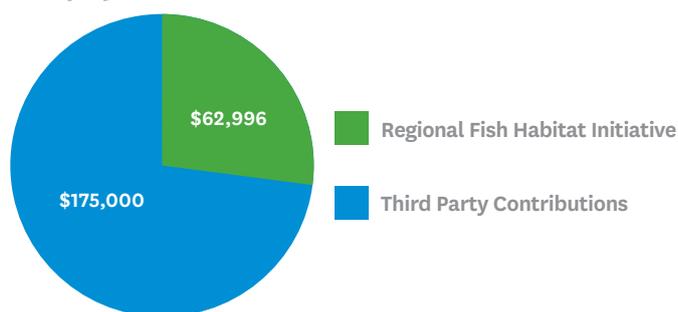
The Regional Fish Habitat Initiative has contributed \$52,211 towards the design and installation of the trout barrier, with other partners funding stream restoration and fish habitat enhancement (e.g. riparian planting). The fish barrier project is a first for New Zealand and could revolutionise how native fish populations are protected at sites threatened by trout.

## Budget information

Total spend 2017-2018



New projects 2017-2018



## What's next?

- Progress short-listed fish barrier and habitat projects
- Communicate with rural land owners about the importance of fish passage on their property and best practices to follow
- Employ student to assist with the Regional Fish Habitat Initiative over the 2018/19 summer