

## Ecosystems, Habitats and Species/Riparian Wetlands, Springs and Lagoons

Braided rivers are a distinctive feature of New Zealand's eastern South Island and have considerable biodiversity value. The braided rivers are characterised by ever-changing channels which are home to many species of birds, fish, invertebrates and plants that have adapted to live in this challenging and dynamic environment. Rare native birds such as wrybill, black-billed gull and black-fronted tern depend on braided rivers for their survival, but they are increasingly under threat. The riverbeds, riparian margins, floodplains and associated wetlands and springs support many of the region's endangered and rare species.

### Targets

#### From 2010:

Implement actions to correct the decline in usable braided river bird habitat.

#### By 2015:

Enhance and protect breeding populations of indigenous braided river birds.

#### By 2020:

Protect significant habitat for a full range of indigenous braided river flora and fauna.

#### By 2040:

All indigenous braided river-dependent species showing positive trends in abundance and health. Increased habitat area usable by all species of braided river indigenous birds.

### Progress to 2020

Not started

Started

Progress

Good progress

Achieving

- The enhancement and protection of habitat on braided rivers is a long game. A number of projects and organisations are involved in maintaining and supporting populations of threatened species by controlling pests, managing weeds and restoring and enhancing terrestrial breeding habitats. Projects also include recreation management (e.g. restricted access for four wheel drives), communication and education for river users.
  - Under the Immediate Steps Biodiversity Programme, Zone Committees have committed more than \$1.6m to 54 projects covering the main activities such as predator control, weed control, and habitat restoration, see fig 9.
  - All of the projects and programmes are undertaken in partnership with other organisations and agencies who provide support and leadership. These include local landcare and rivercare groups, CWMS Zone Committees, local landholders, DOC, Fish & Game NZ, LINZ, TAs, and contractors who often donate extra time and resources. These partners all actively lead projects and source funding for projects that contribute significantly to the protection and enhancement of braided rivers.
  - The Braided River Flagship programme, and the Regional Braided River Initiatives funding, are focused on braided river ecosystem health and breeding bird habitat.
- The Braided River Flagship is focused on the Upper Rakaia and Rangitata Rivers, regionally important rivers with exceptionally high ecological values and encouraging local community and agency support. The Braided River Flagship project on the Rangitata and Rakaia Rivers has received almost \$650K in funding over the past six years.
  - The Braided River Regional Initiative program includes three large scale projects across the region (Clarence, Rangitata, and Lower Waitaki) and three smaller investigations to inform future management, see fig 9.
  - The Canterbury Regional Policy Statement outlines objectives to halt the decline, restore and enhance ecosystems and protect significant indigenous vegetation and habitats. The recent Plan Change 4 of the LWRP updates the definition of river margins and rules for stock exclusion.
  - Environment Canterbury has recently mapped the habitat area useable by all species of braided river indigenous birds. The purpose of the mapping project is to provide a 2012 measure of extent of 'useable' braided river bird habitat across the region, as a baseline for monitoring progress toward the 2040 target. It focuses, in particular, on the habitats associated with braided river beds that are utilised by native ground-nesting, wading birds, gulls and terns during their breeding season.

Fig 9: Braided River Projects

**Significant Projects**

1. **Region wide survey of black-billed gull (investigation):** Three year program to determine numbers and distributions of breeding colonies of black-billed gulls (classified as nationally critical) in Canterbury.
2. **Region wide survey of black-billed gull (investigation):** Investigate the population structure of the black-billed gull. Samples from over 700 birds at 27 colonies have been collected.
3. **Clarence Island habitats:** Creating or enhancing habitat islands for breeding birds trial combined with predator control trial. Initial results show both trials have been successful.
4. **Rakaia River:** Aerial and ground weed control to increase braided river bird habitat.
5. **Upper Rangitata:** Landscape scale predator control involving significantly improved breeding success this season for both wrybill and black-fronted tern.
6. **Upper Rangitata:** Southern black-backed gull control was led by the local land care group and supported by DOC.
7. **Upper Rangitata:** Aerial and ground weed control to increase braided river bird habitat. Mature Russell lupin numbers have been reduced. Good progress in the Rangitata for broom and gorse control. Rangitata Gorge Landcare Group has also undertaken a significant amount of work.
8. **Mackenzie Basin – robust grasshoppers:** Robust Grasshopper is a nationally endangered species – work has been done to improve the success of future conservation translocations and to develop more accurate monitoring techniques.
9. **Lower Waitaki Island habitats:** Creating or enhancing habitat islands for breeding birds trial combined with predator control trial. Initial results show both trials have been successful.
10. **Lower Waitaki River Mudfish:** Lower Waitaki River Management Society has a range of initiatives in relation to this project. Planting days completed and weed control completed.

