Kaunihera Taiao ki Waitaha | Canterbury Regional Council

Bird Island Annual Report

April 2026

Environment Canterbury Regional Council
Kaunihera Taiao ki Waitaha

Why are we doing this work?

Many braided river bird species are at risk or declining, largely due to pressure from human disturbance, habitat loss and flooding. While pressures are felt year-round, they are felt most strongly during breeding season. As a result, it has been proposed that finding careful ways to manage and enhance raised, stable gravel islands could lead to improved fledgling success. There are two main things we are focused on:

1. Maintaining flow throughout the breeding season

Flows drop in summer for smaller foothills fed rivers and the resultant dry braids leave birds and nests vulnerable to predation. Through some carefully designed and carried out split flow diversions, the risk of a braid drying up during lower flow days is reduced. Maintaining flow around the island should physically block poorer swimmers and discourage less motivated predators.

2. Keeping islands clear of weeds

Several key bird species prefer bare-gravel habitats for nesting. Clearing islands of weeds using mechanical methods clears the active surface quickly. Spraying leaves the material in place and doesn't result in bare gravels fast enough for birds looking for places to nest. This work has an additional flood protection benefit and reduces the amount of agrichemical used in ECans usual flood protection works.

A New Consent(s)!

In July 2025, Environment Canterbury was granted three consents for the enhancement of bird islands within the Hakatere/Ashburton and Rakahuri/Ashley rivers. This work has previously been carried out using permitted activity rules (flood protection focus) or guided authorised gravel abstractions. This is the first year the work has completed under these consents. This annual report is written to comply with the conditions of the consents, but also to report and share results and lessons learned with interested parties so this work can continue to improve.

2025 Work Summary

This year, three islands were enhanced using split flow diversions. One island above SH1 bridge in the Hakatere/Ashburton River, and two in the Rakahuri/Ashley River at the Okuku river confluence and smarts road. These sites have hosted breeding birds in previous seasons.

In addition to the physical works, process improvements and updates to the best practice guide for island enhancement are in process or have been completed. This includes updating the documents to reflect the notification requirements and limits set out in the three resource consents. Training and familiarisation work for Environment Canterbury staff who will be planning these works is also planned to be rolled ahead of the 2026 seasons to ensure compliance with these consents is maintained and the work continues to be planned carefully. Overall, 2025 has set a high standard of works planning and delivery and has demonstrated flexibility and commitment to improvement.

Key Successes and Learnings

Following is a list compiled following conversations with ECan staff involved in the project. We are open to further comments and suggestions, please email Amy-Grace McIlraith at amy-grace.mcilraith@ecan.govt.nz.

Build it and they *might* come:

Building islands in places known to host birds in previous years does not necessarily mean the birds will use enhanced islands. Although islands may not be used for breeding in every case, the islands-maintained flow and were utilised by non-target species, but still at-risk species.

- *Process action: Re-enforce this in best practice guide and during communications with our partners and the community to manage expectations.*
- *Completed action: This was addressed in an internal review and planning session in March 2026.*

Multi-value-benefits

This work is an efficient way to add value to flood protection work. The engineering team in Ashburton had plans to carry out weed clearance work around State highway 1 bridge and were willing to manage the work to install a split-flow diversion for the purpose of bird island enhancement while the machines were already on site.

- *Action: Continue to socialise these consents across the wider organisation to look for other opportunities to add value to works already occurring.*

Proper lead-in time is essential

Sufficient lead in time is required to ensure that work is managed well, and site selection includes sites other than those first proposed.

- *Completed Action: During an internal review and planning session in March 2026, the importance of proper lead in time was highlighted.*
- *Process Action: Annual timeline, process and deadlines added to internal documentation.*
- *Future Action: Site scoping and initially notifications will kick off in June.*

Collaboration is a key indicator for success

Notification with external partners was carried out well and relationships were productive. Internal communication with compliance needs to be stronger. There is strong support for this work from external agencies which enables the work to go ahead with minimal roadblocks. The support exceeded that of what was initially expected, and local knowledge and support of both non-profit groups and the flexibility and expertise of private companies was highlighted by project managers.

- *Process Action: Best practice guide has been updated to include works notification to compliance officers.*
- *Future Action: Continue to involve external stakeholders throughout the process and ensure that we are acknowledging the time and resources provided.*
- *Future Action: Compliance will be notified after initial scoping has been completed to offer them the opportunity to comment or collaborate where necessary.*

Hakatere Main Stem at SH1

Background

The SH1 bridge on the Hakatere/Ashburton River is the most consistently used breeding sites for Tarāpunga/Black Billed Gull colonies in the district. River works to clear weeds around the bridge were planned to occur over the winter. In line with the rivers section priorities, it was proposed that changes to the works methodology could improve bird habitat as well as flood capacity. Under the code of practice, the site was root-raked. Under the new consents, a split flow diversion was carried out to re-wet a dry braid.

Figure 1: Drone image of Ashburton River, red arrows indicating upstream and downstream extent of the diversion.

Works Narrative

A pre-works inspection was undertaken in April 2025, representatives from Arowhenua Rūnanga were in attendance. The goal of this inspection was to assess the suitability of the site for enhancement work. A split-flow diversion was deemed an appropriate method for deterring predators at this site. It was determined that sufficient flow could be supplied to both the existing and existing dry channel by Dan Meehan, area engineer for central canterbury. Works were carried out on the 28th of August 2025, under the supervision of Mark Faichnie, area supervisor for central on behalf of Dan Meehan. Desktop inspections, environmental planning and works supervision was carried out by ECan staff. Physical works were carried out by Ashburton Contracting Ltd (ACL) representatives.

A pre-start walk over with ACL was completed before works started to identify key risks and confirm methodology. Work began to excavate the dry channel, working from the downstream end up. The diversion followed COP process, the water was let into the deepened braid as a last step. This work was carried out using a 30t excavator.

Figure 2: Before looking downstream toward the SH1 Bridge, taken 27th August.

Figure 3: After diversion works are completed, taken 29th of August.

Rakahuri River at Smarts Road

Background

The site at Smarts Road has been a productive breeding site for Tarapirohe, Poaka, Ngutu parore and other species for several years. This work was carried out by working with a local gravel extractor, which has been an approach used in previous years. The Ashley Rivercare Group was also heavily involved with the identification of habitat and continue to be an important collaborator throughout the Rakahuri. A split flow diversion was used to improve flow on the true right bank of the island to reduce predator pressure on potential nesting birds.

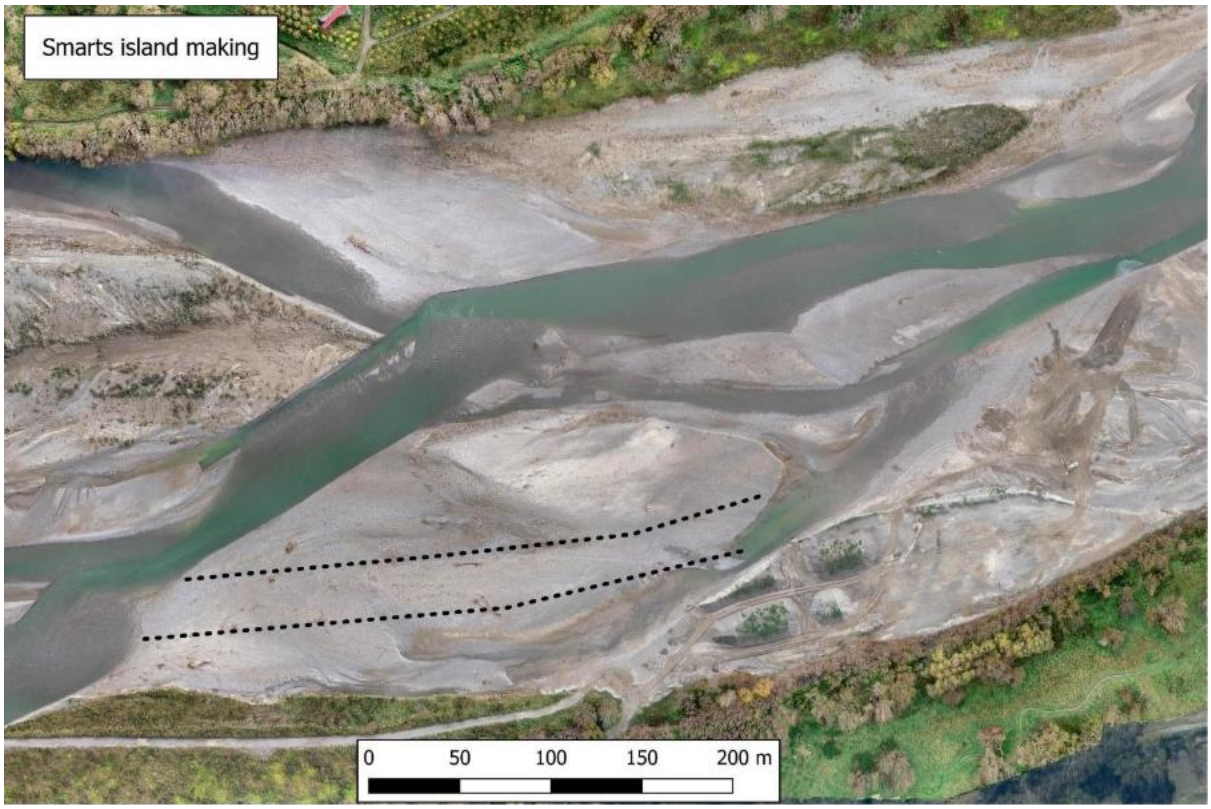

Figure 4: Proposed Island at Smarts rd, drone imagery taken by Grant Davey

Works Narrative

Following site selection meetings and desktop inspections, this site was determined to be a candidate for island enhancement. Using a 20t excavator, a dry braid was dug out. Some of the material was taken out of the riverbed under the gravel abstractors existing take. Greg Stanley and Grant Davey were on site for the pre-start walk-over to re-iterate the methodology and site sensitivities. Grant Davies remained on site for the works to maintain an eye on some ngutu pare and other bird species active in the area. The final step of the diversion was to make the upstream cut to allow water down the braid. This was completed after a phone conversation with Greg Stanley.

Figure 5: Before taken on the 1st of September 2025.

Figure 6: After diversion works on the 16th of January 2026.

Rakahuri and Okuku rivers Confluence

Background

The confluence of the Rakahuri and Okuku rivers has been used in past years by various species for breeding and feeding. The Ashley Rivercare group is very active throughout the length of the Rakahuri river and the driving force behind bird island enhancement work in the Rakahuri.

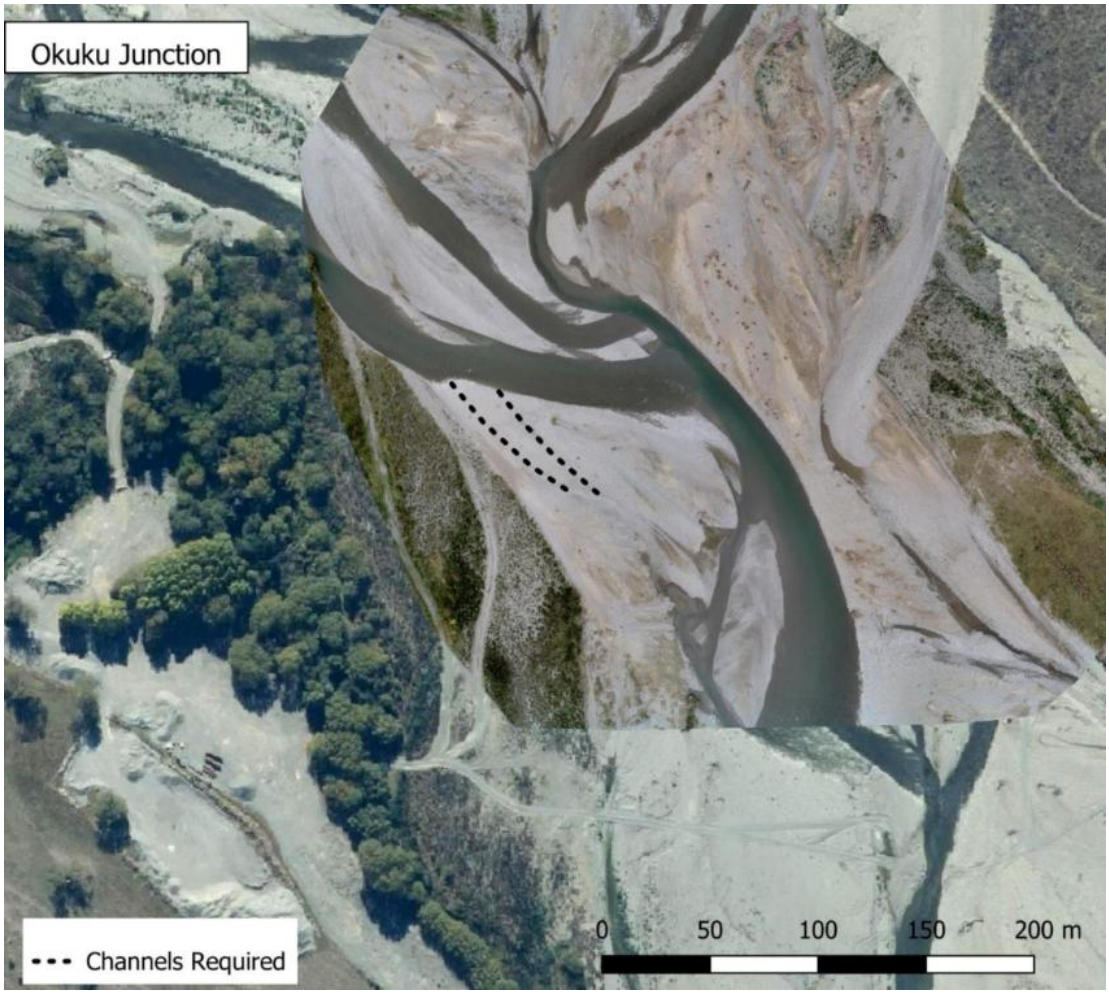

Figure 7: Drone imagery taken by Grant Davey, planned diversion works at the Rakahuri/Okuku confluence.

Works Narrative

Greg Stanley met several times to understand the work that Grant Davey and Nick Leggard had done to identify several sites on the Rakahuri. Of about five sites initially proposed, two were selected. This site was chosen for a range of reasons, but primarily because some tarapirohe were showing interest in the area at the time of the visit. Tarapirohe have nested in this area for three consecutive seasons before this work started. Willow and subsequent weed removal is thought to be the driver for this.

A pre-start inspection and walk over was completed by Greg Stanley with the operator from Southern Screenwork's in attendance. Areas for excavation were marked on the ground using dazzle. This operator has experience working in braided riverbeds as a gravel abstractor, and so many of the consent requirements were familiar to them. Starting early in the morning, a 12t excavator was used to deepen an old braid. Confirmation was sought by the operator prior to the final cut being made, which opened up the channel and completed the split flow diversion. Flow was split between the two braids as expected, with no fish stranding.

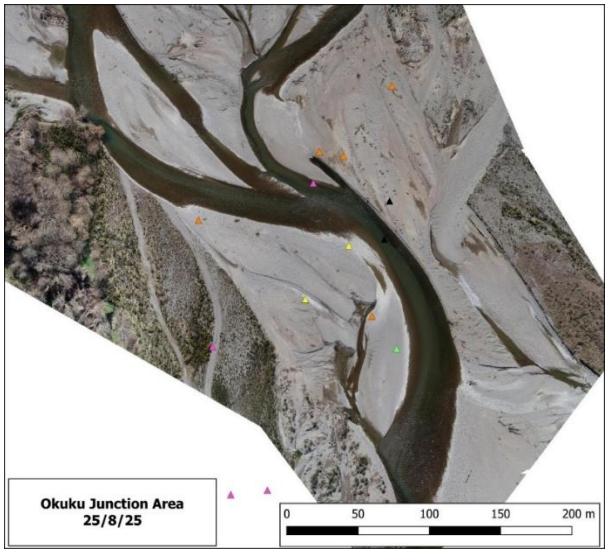

Figure 9: Drone Imagery taken before diversion works on the 25th of August 2025.

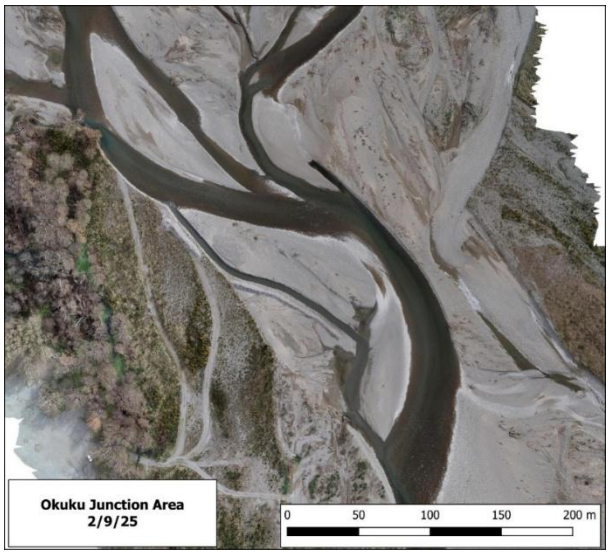

Figure 8: Drone Imagery taken after diversion works 2nd of September 2025.