

KAIKOURA EARTHQUAKE UPDATE

KAIKOURA EARTHQUAKE UPDATE - no. 20

9 June 2017

This weekly bulletin provides the latest information about the rebuild of road and rail networks damaged by the Kaikoura earthquake in November 2016. The bulletin is produced by the North Canterbury Transport Infrastructure Recovery (NCTIR) – an alliance representing the NZ Transport Agency and KiwiRail, on behalf of Government. We're keen to hear your questions about our work, or any feedback on this bulletin. Drop us a line via email at info@nctir.com or give us a call on **0800 NCTIREQ** (0800 628 4737) – we'd like to hear from you.

MILESTONE: TWO MAJOR SLIPS NORTH OF KAIKOURA COMPLETELY CLEARED

The earthworks teams have achieved a huge milestone in the last week by completely clearing two of the landslides north of Kaikoura. Slips 1 and 3 are now completely cleared and ready for the road and rail crews to begin their work reconnecting communities affected by the November earthquake. Clearing the slips post-quake has not been an easy task because the cliff faces are fractured, broken and highly unstable.

Road and rail have now been diverted around the toe of slip 1 which has been a challenging job. All construction traffic working to the north has had to pass through the site adding to the complexity and difficulty. Good progress is being made on the other major nearby slips.



COMMUNITY MEETING 14 JUNE, KAIKOURA

Kaikoura District Council is hosting a meeting with NCTIR and Destination Kaikoura to give an update on all things SH1 and Tourism Marketing.

NCTIR and Destination Kaikoura will make short presentations and then be on hand to answer questions and discuss issues.

Venue: Kaikoura Memorial Hall, 32 Esplanade, Kaikoura

Time: 5:15 – 7:00pm

STATE HIGHWAY 1, SOUTH OF KAIKOURA - WILL REMAIN OPEN UNTIL 19 JUNE WITH AN UPDATE EARLY NEXT WEEK (12 June)

There will be planned regular closures to State Highway 1, south of Kaikoura during the winter months. Notice will be given before any planned closures to minimise the inconvenience to the community. NCTIR will give residents and road users several days' notice of the planned closures, likely to be for more than one day at a time. Details of the closures will be online, via social media and on the electronic message boards on the state highways.

These regular closures will enable us to continue recovery works that will increase the resilience of the area as well as continue works on the road and rail realignment around the landslide that came down over Easter.

Details will be available next week.



PLAN AHEAD: TWO-NIGHT CLOSURE ON BLENHEIM END OF ALTERNATE ROUTE WILL MEAN A DETOUR VIA NELSON



As part of the ongoing monitoring and maintenance on the alternate route between Picton and Christchurch, Eve's Creek Bridge (about 70km out of Renwick on SH63) will undergo urgent repairs to its approaches.

This will mean closing the bridge for two nights from 7pm this Sunday 11 June. Traffic will be detoured 80km via Nelson.

The repairs have been scheduled to accommodate ferry timetables and cause the least disruption to travelers. NCTIR thanks everyone in advance for their patience. The closure/detour schedule is (subject to weather):

- Sunday 11 June, from 7pm to 6am
- Monday 12 June, from 7pm to 6am

Traffic from either Renwick or Kawatiri (at the junction of SH63 and SH6 just south of St Arnaud) will be detoured via SH6 through Nelson.

The alternate route has had a four-fold increase in traffic since the Kaikoura earthquake, and was not designed for the level of traffic currently using it. To keep this route safe and serviceable, ongoing maintenance and repairs are required.

PROJECT DIRECTOR DAVID LOE COMMITTED TO THE COMMUNITY



David Loe has taken over as NCTIR Project Director and has signaled a strong commitment to community engagement and growing the experience and knowledge of the more than 1000 people now working on rebuilding the road and rail networks damaged by the Kaikoura earthquake.

'I am looking forward to building on the great progress Duncan Gibb was able to achieve during his six months leading the project,' David said.

David, who has been Operations Manager for the alliance since December 2016, has nearly 40 years of experience working on large-scale infrastructure projects and says his long-standing connections with the four construction companies involved in the project will help achieve milestones and get the work done. In the past he has worked on the Cambridge section of the Waikato Expressway and the Hobsonville Motorway in Auckland, as well as road and rail projects including the Awatere bridges in Marlborough. 'I am really proud of what the NCTIR team has achieved so far, and I see a big part of my role being to grow our staff in such a way that they leave their job with more skills and knowledge than when they started,' David said.

A Fellow of the Institution of Professional Engineers New Zealand (IPENZ), David has received citations for innovation in civil engineering that acknowledges his commitment to working closely with communities to get critical infrastructure works completed. 'I am deeply committed to our vision to move mountains and reconnect communities,' he said.

FIRST WORK TRAIN THROUGH A TUNNEL ON THE MAIN NORTH LINE

A significant rail milestone was achieved last week when a work train travelled through Tunnel 1 between Claverley and Oaro, for the first time since the earthquake. This is the first of 20 rail tunnels between Cheviot and Seddon. Four of these tunnels were damaged and need to be repaired.

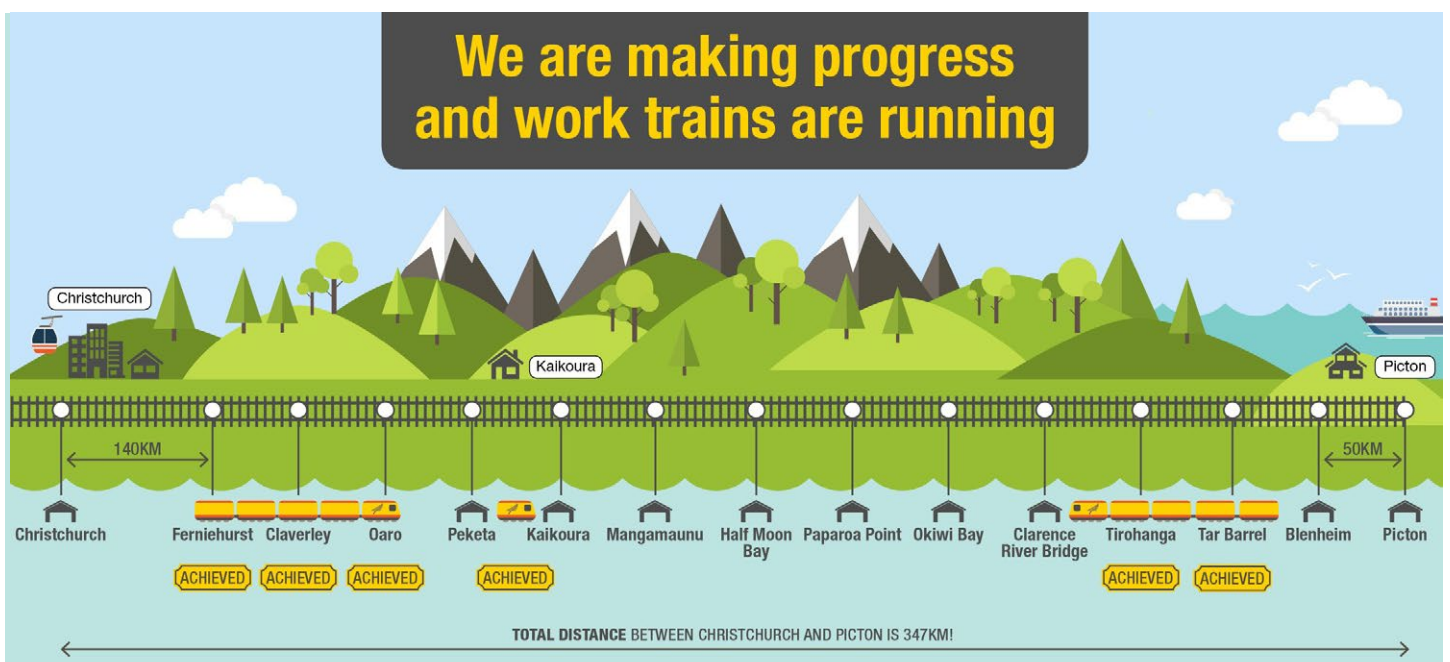
Expect trains

Work trains will soon be operating between Christchurch and Kaikoura and between Picton and Clarence.

Always slow down as you are approaching a level crossing and be prepared to stop.



The rail tunnels, in fact, protected a lot of the tracks from a number of major slips.



WHALES BACK ROCK ANCHORING IS NOW COMPLETE

Rock anchor work on the slip at the Whales Back saddle on the Inland Road (Route 70) between SH7 and Kaikoura is now complete. Forty-five anchors have been installed to stabilise the rock face, which fractured after the November earthquake.

The design for the rebuild along the original alignment is underway and construction will start in the next few months.



SITE 7 NORTH OF KAIKOURA UPDATE (see photo collection at the end of this Bulletin)

At site 7 near Ohau Point, a mobile quarry has been set up to convert the slip material into engineered aggregate that can be reused to build the seawall. Our earthworks teams continue to remove this material from the slip's three main chutes.

At the same time, design work for the seawall foundations is almost completed and we are about to begin pouring the 750-metre long concrete foundations.

Sites 7 and 6 are the most remote of all NCTIR construction sites and the logistics of getting materials and personnel to them are quite a challenge.

ROAR OF LION SUPPORTERS TO BE HEARD ON THE ALTERNATE ROUTE

Drivers on the alternate Picton to Christchurch route via Lewis Pass could see more campervans and rental cars than usual during June. With the British and Irish Lions rugby team touring New Zealand, there are plenty of keen supporters on the road. In particular, the Christchurch match on 10 June, and the Dunedin match on 13 June will see supporters travelling by ferry and then down the alternate route.

The NZ Transport Agency has worked closely with tour organisers and tourist providers to understand likely traffic numbers and to also promote how to prepare for local winter driving conditions for a safe and enjoyable trip.

The Upper South Island Travel Guide (produced in 11 languages - www.nzta.govt.nz/resources/plan-your-journey/) is available in print and online in multiple locations, backed by advertising such as this Wellington ferry terminal billboard to prompt drivers to be prepared.

If planning a winter journey for either yourself or for a guest who is not familiar with the alternate route, use the resources here: www.nzta.govt.nz
Before travelling, check the latest road conditions:

- Visit: www.nzta.govt.nz/traffic
- Call **0800 4 HIGHWAYS** (0800 44 44 49) to speak to the call centre team

Please be patient if sharing the road with a campervan and, if you're unfamiliar with the road, please pull-over and let traffic pass.



MORE PULL-OVER AREAS ON ALTERNATE ROUTE HELPING ALL DRIVERS

Driver patience and courtesy plays a significant role in safe travel for all road users. In particular, that's the case for the narrow, often winding state highways between Picton and Christchurch where, since the Kaikoura earthquake closed State Highway 1, there is now four times the usual traffic volumes.

The alternate route between Picton and Christchurch is challenging to drive, particularly during winter. To improve the safety and journey experience for all road users and affected communities on the route the Transport Agency is spending \$60M on improvements and safety.

Improvements include new pull-over areas so slower traffic can let traffic pass. These are all along the route, with the photo here showing the latest new pull-over in construction last week near the top of the Lewis Pass.



Because of the harsh weather conditions, most winter work will focus on maintaining a safe and serviceable road. And while some improvement work will also be done where possible, most of the ongoing improvement programme will start ramping up again from September for another busy summer.

The crews working along the alternate route appreciate the patience of drivers and the warm welcome from the local communities where they're working, which is helping them get this essential work done.

NATIVE FRESHWATER FISH

Native freshwater fish were moved out of harm's way before workers installed a new culvert at Irongate Stream, north of Kaikoura.

The culvert was being built as a temporary platform for machinery to work from so that they would not disturb the stream and its inhabitants. However, before the work could happen, a fish salvage operation took place. Common bully, inanga, and longfin eels were moved out of the work area. Inanga (a whitebait species) - and longfin eel are both considered to be at risk of declining.

This delicate salvaging operation, using an electric fishing machine, was done by NCTIR Freshwater Ecologist Tanya Blakely and NCTIR Project Ecologist Leigh Bull, along with NCTIR Environmental Advisor Crystal Lenky.

As part of the restoration works, NCTIR is committed to minimising effects of the work on any threatened, or at-risk taonga (treasure) and marine mammal species.



What is electric fishing?

Electric fishing is a harmless technique used by specially trained and certified ecologists to survey freshwater fish populations and to move fish if required.

Two people are involved: a 'fisher' and a 'catcher'. The fisher carries an electric fishing machine, mounted as a backpack. The machine generates an electric current that the fisher passes through the water using a hand-held 'wand'. The current temporarily stuns nearby fish, interrupting their ability to swim away, so that they float in the water. The catcher positions a net downstream to capture the floating fish before they recover.

The captured fish are held for a short time in a bucket of stream water so they can be easily identified and measured. Usually, they are then released back into the stream or, in some situations, relocated to other suitable habitat if required because a waterway is to be piped, filled or temporarily affected by nearby works.



NCTIR STAFF MOVE INTO CLARENCE ACCOMMODATION FACILITY



The first contractors are set to move in to the new mini accommodation facility at Woodbank School, near Clarence, as early as next week.

Made out of shipping containers that are surplus from the Christchurch Earthquake rebuild, the facility will house 30 people.

Although fairly similar in style, the Clarence facility is much smaller than the one in Kaikoura which can house 10 times as many people.

This week, the finishing touches for the Clarence facility were put in place and the foundations for a common room were poured. Once this has been moved onto the site, it will act as a recreational and dining room for the contractors.

The facility will bring jobs to the small community of Clarence; a team of three will supply breakfasts, lunches and dinners, while another two local contractors will manage the cleaning.

The on-site facility will minimise travel time for workers north of Ohau Point, some of whom are currently driving from Blenheim before working a full day because of the short supply of accommodation in the wider community.

LOCALS INVOLVED IN THE KAIKOURA EARTHQUAKE RECOVERY SINCE DAY ONE

Kevin Rush and his team of five employees have been busy moving mountains north of Kaikoura as part of the wider earthworks team.

Kevin always knew the slips were massive - but photos don't do the job justice. 'Excavators look like matchboxes on these slips and people need to remember these are up to 50 tonnes in size, that's how huge these monster landslides are,' he said.

With one excavator, two bulldozers and two trucks, Kevin's second-generation business is a big part of the northern clearance operation. The family business originally started in the mid 1950s and Kevin has been at the forefront of it since 1996 carrying out contracts on behalf of local farmers and KiwiRail.

The prospect of working on landslides up to 400 metres high, do not phase him in the least. 'I've been doing this all my life; this time around the slips are just much larger,' Kevin said.

With his 40 years of industry experience, Kevin was only too happy to lend a hand when the earthquake struck and has taken on five extra employees, bringing his total staff number to eight.

'It's a great community project and I'm enjoying helping out with my local knowledge,' Kevin said.



KEEP UP-TO-DATE

How to contact us and keep up to date with our road and rail projects:

- Subscribe to our weekly bulletin by emailing info@nctir.com, with 'Bulletin' in the subject line.
- Visit our website: www.nzta.govt.nz/kaikoura-earthquake-response/
- Call our freephone: **0800 NCTIR EQ** (0800 628 4737)
- Email us if you have a question: info@nctir.com
- Attend a community meetings - keep an eye on your local newspapers for details.
- Follow us on Facebook, see: NZ Transport Agency - South Island www.facebook.com/nztasouthisland/ and KiwiRail www.facebook.com/kiwirailNewZealand/
- For travel information about road conditions, see: www.nzta.govt.nz/traffic/regions/11

PROGRESS ON THE NORTHERN SLIPS

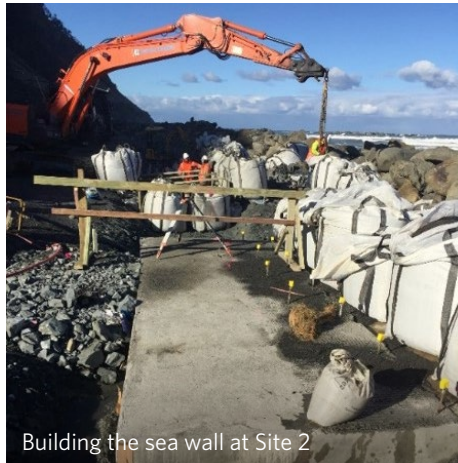
The following photos show the progress being made on clearing the slips north of Kaikoura. It also shows the narrow corridor in which the work has to take place. At some of the sites, this work includes building sea walls, clearing slip material, building bridges and roads all at the same time.



This photo shows the narrow work corridor at Site 1.



Site 2 is a busy place with road realignment, bridge building and material hauling, as well as construction of a sea wall.



Building the sea wall at Site 2



Clearing the massive slip at Site 6 near Ohau Point is challenging.



Site 7 slips



Progress at Site 8