KAIKOURA EARTHQUAKE UPDATE

WEEKLY BULLETIN - no. 5

24 February 2017

This weekly bulletin aims to give you the latest information on all the work underway to rebuild and repair the road and rail networks damaged by the Hurunui/Kaikoura earthquakes in November 2016. The bulletin is provided 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 from you with any questions about our work, or with 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.

OUR FOCUS: PROTECTING THE MARINE ENVIRONMENT

Protecting Kaikoura's unique coastal marine area and mitigating any impacts the rebuild work may have on any wildlife in the area is a top priority for our programme of work.

We're working closely with the Department of Conservation to ensure that our work to clear the slips blocking SH1 and the railway line is carried out in a way that takes account of the need to protect the environment and cultural values of the area.

We have engaged an independent marine scientist to work with us as we develop options for clearing the slips on the coastal route. The need to mitigate the impact of our work on seals and other wildlife in the area is an extremely important consideration as we progress our plans to clear the slips and rebuild the road and rail corridor.



We're committed to re-opening SH1 and the railway line as quickly as possible to re-connect communities and help get the region back on its feet. Equally, we need to carry out this work in a way which recognises and respects the importance of the marine environment.

The first phase of this work is two-week trial, which is now underway at Site 7, a 20,000 cubic metre slip 300m north of Ohau Point. The trial is using seal-proof fencing (pictured above) and on-site seal herding to keep seals and their pups away from the immediate base of the slip site, clear of falling rocks and debris while helicopter sluicing and slip clearance work is carried out. The fencing is working well.

At the end of the trial, the results will be reviewed to develop the best methods to use during our work programme. This is challenging work and we may need to come up with some creative solutions to keep the seals out of harm's way.

SH1 NORTH

Road and rail links north of Kaikoura to Picton remain closed. Our work recognises these networks are critical for getting your goods to market, bringing visitors to the region and providing access for the many local communities along the route.





Latest update:

We're making good progress on many fronts to the north, with more machinery and crews moving on-site from next week to begin building access tracks and removing slips.

- This week our crews have installed rockfall safety bunds along the bottom of the slips at Sites 1A (pictured right), Site 1B and Irongate (Site 2), about 1km north of Blue Duck Road. These bunds help protect our construction crews from falling rocks, enabling work to carry on on the slip face while other crews travel past the site to access slips further to the north.
- Four minor slips near Irongate have been cleared this week, the material from these being used to build the construction access track (pictured below, right) around Site 2. This track is expected to be completed by the end of next week.
- More heavy machinery excavators and bulldozers – will move on-site towards the end of next week to begin building the access track around Sites 3, 4 and 5 at Half Moon Bay to provide access to Ohau Point (Site 6).
- Helicopter sluicing and rock removal has continued at Sites 3, 4, 5 and 6 and to the south of Site 7, where crews continue scaling work, making it stable for remote controlled excavators to make their way through to Ohau Point. These slips remain highly unstable and hazardous, with large rocks and other loose material frequently falling.
- At Okiwi Bay (Site 8), a bulldozer is about is begin building an access track to the top of the slip to begin its removal.
- Removal of Site 9 at Waipapa Bay also begins next week. The material from this slip will be stockpiled for future use in the repairs of State Highway 1.





SH1 SOUTH

State Highway 1 south of Kaikoura remains fragile. The highway is subject to on-going closures because of weather and road repair work. Travel on the route continues to be restricted to daylight hours – 6am to 8pm.

Latest update:

Strengthening of the Oaro overbridge (right) is progressing well. Debris from under the bridge have now been removed, exposing the concrete columns and bridge foundation. Crews have already moved on site to begin removing the minor crack damage. Once completed, the bridge foundations, beams and abutments will be strengthened with structural steel bracing. This will enable the bridge to carry heavy freight vehicles. The work is scheduled to take several months and traffic will continue to be detoured around the bridge until the work is completed.



• Early next month, work is expected to begin strengthening the Parnassus overbridge which has been closed since the earthquake. We expect to have a start work date finalised within the next couple of weeks and will advise the local community as soon as this is available.

INLAND ROAD

Inland Road (Route 70) is now open 24/7 and remains a critical link for the Kaikoura community, with SH1south open only during daylight hours.

Latest update:

Work on the Inland Road continues to ensure the road will be in the best possible condition before
the start of winter. The nature of the road makes it susceptible to closures during heavy rain and
weather events. During the next few months, our crews are completing road repairs along the
entire route and removing of rock fall hazards.

ALTERNATE SH1 ROUTE- PICTON TO CHRISTCHURCH

The alternate route (via Lewis Pass) is continuously being improved to ensure the route can better cope with the extra traffic, as well as making it safer and improving travel times for all road users and affected communities. This includes improving the condition of the road, as well as installing additional signage and introducing speed limit reductions.

Latest update:

- All the work along this route is to improve the condition of the road and make it safer before winter.
 - 4.6kms of new guardrail is being installed along various areas of the route to increase safety by help prevent vehicles running off the road
 - Other sections of the highway are being rebuilt to strengthen the road to cope with the extra volumes of vehicles
 - 20km of the planned 35km pre-winter road resealing is now completed to ensure the road can better cope with weather conditions and the extra traffic



- Protection works are being installed along SH7 where erosion issues have been identified
- SH7 is to be realigned at Silvia Flats (previous page), near Lewis Pass, to protect the road from erosion and slumping. This work will get underway within the next few weeks.
- We're also identifying areas to install slow vehicle bays and improve traffic flow

RAIL NETWORK

The Main North Line between Picton and Christchurch is a critical part of the network for moving freight between the North and South Islands. Work is underway to re-open the line south of Kaikoura, enabling KiwiRail to access the main north line in the coastal corridor and bring in material needed to repair the line.

Latest update:

Perniehurst (Bridge 90), south of the Hundalee, is well underway (right). This is a major project in the programme to restore the Main North Line between Picton and Christchurch. The bridge will be demolished and temporary bridging spans installed across this section of the line to get it re-opened as quickly as possible. More than 1 million tonnes of freight is moved on the Main North Line each year.



- Near Hawkswood, just north of Parnassus, work got underway this week repairing more than 200m of track, including culverts and retaining walls, which have slumped. This is a big job that is critical to the overall repair programme for the rail network. This will enable the line to be used for the movement of equipment further north. Several crews are working at this site.
- Ballast trains are bringing stones along the rail line to the sites where the sleepers have slumped. The ballast is laid on the ground and the rails on top. The earthquake caused the ballast to slump at many locations.
- With access tracks being built around the slips to the north of Kaikoura, KiwiRail teams can now begin detailed assessments of the tracks in this area to help finalise the design and construction timetable. Like the highway, the rail tracks have been badly damaged.



KAIKOURA HARBOUR

Reinstatement of Kaikoura Harbour is crucial to restoring the economic prosperity of the town's tourism and fishing industries.

Latest update:

- More than 10,000 cubic metres of material has now been dredged from the main marina channel.
 This is being used to construct a cofferdam across the marina basin: a watertight enclosure
 pumped dry area that will enable construction work can get underway to deepen the marina basin
 below the waterline within the harbour.
- We're investigating barge options to excavate the outer channel of the harbour 200m beyond the harbour wall. This area is too deep to excavate from the land.



KEEP UP TO DATE

How to contact us and keep up to date with the NCTIR project:

- Subscribe to receive our weekly bulletin by emailing info@nctir.com, with "Bulletin" in the subject line.
- Visit our website: www.nzta.govt.nz/projects/kaikoura-earthquake-response/
- Call our Freephone: 0800 NCTIR EQ (0800 628 4737)
- Email us if you have a question: info@nctir.com,
- Attending one of the community meetings, keep an eye on your local newspapers.
- Follow us on Facebook: www.facebook.com/nztasouthisland/ or www.facebook.com/kiwirail



SH1 Kaikōura Coast remedial works

