



Northland Rail Programme

May 2024

Kia ora

Our work repairing the North Auckland Line (NAL) is almost complete, and we expect to reopen the line to freight trains in late July.

There were more than 200 damage sites along the NAL between Swanson and Whangārei, including overslips, slumps, washouts and underslips, following last year's late January weather event. Many of these were further damaged during Cyclone Gabrielle.

We've made excellent progress over the last month.

Repairs to allow the reinstatement of track have now been completed on all but two of the minor to moderate

damage sites and one of the major damage sites. The track has now been fully reinstated on 150km of the line, from Swanson to about 25km south of Whangārei.

It's been a huge undertaking, requiring us to understand complex geology and undertake major civil engineering works in some areas.

There is still work to do over the coming months, which will be done in tandem with track testing.

Safety has to be the priority and before heavy freight trains can run again between Auckland and Whangārei there is a rigorous compliance regime to go through. This is now our focus, and you will see a lot more work trains,

test trains and other rail vehicles on the line over the coming months.

It's been a busy time since the line was closed in 2023, and I'm sure we all look forward to seeing freight trains on the tracks again. KiwiRail remains committed to supporting freight flows into and out of Northland, providing transport options for the region's businesses, and helping take freight off the region's roads.

If you have any questions about the work we're doing, please contact us at: northlandrail@kiwirail.co.nz

Eric Hennephof

Northland Rail Upgrade Programme Director



Rail safety

With much of the track at damage sites in Northland now in place, there will be a lot more rail activity over the next few months.

This will include tamper trains, work trains, test trains, the EM80 track geometry assessment vehicle, and Non-Destructive Testing vehicles moving over most of the 180km length of the North Auckland Line.

We urge locals to be very cautious when approaching a level crossing – as rail vehicles or trains could appear at any time of day and night from either direction.

We'll be working alongside TrackSAFE NZ and local stakeholders to share important rail safety messages with the community.

Protecting the environment

The flooding and slips caused during the January 2023 extreme weather event and Cyclone Gabrielle left their mark on Northland's natural environment. KiwiRail are committed to making sure our emergency repairs don't make the situation worse.

Protecting native flora and fauna and ensuring erosion and sediment control have been a key focus since the rail rebuild began.

Working with specialist consultants RidleyDunphy and AECOM, and the Department of Conservation, a number of streams, wetlands and other areas of native vegetation have been proactively assessed and methodologies implemented to minimise effects on flora and fauna.

This resulted in:

- Relocating native lizards at six damage sites
- Relocating more than 200 native fish from waterways next to four sites
- Putting bat management protocols in place during vegetation removal after long-tailed bats were discovered at a site
- Regular nest bird checks and mitigations when they were discovered
- Installing Erosion and Sediment Controls and progressively stabilising sites upon completion of various work phases.

Using heavy machinery in the narrow rail corridor can be difficult. Wherever possible, we have kept our worksites small, minimised disturbance



An example of erosion control - improved drainage around the 99km mark, near Woodcocks.



*An "at risk" Copper skink, *Oligosoma anaeum* found during ground vegetation clearance at the 223km damage site south of Kauri.*

of vegetation and implemented construction methodologies which minimises impacts on the environment.

It has been a real team effort between the environmental experts and our design and construction teams.



*In addition to safely removing many long fin eels from nearby waterways, "at risk" Inanga, *Galaxias maculatus* were found and relocated at the 116km mark south of Wellsford.*



Progress repairing the North Auckland Line



Work progressing at the massive 223km washout site south of Kauri, with a large culvert now installed.

Track has been successfully reinstalled across damage sites on the North Auckland Line to the 185km mark, about 25km south of Whangārei. The track testing and

assurance phase is now underway.

Repairs have been completed on 97 minor - moderate slides and work continues on the remaining two sites.

Work is functionally complete on all but one of the major damage sites, which will be finished by early June. While the line is closed we are also taking the opportunity to do work at the 195km mark. There will be varying degrees of work continuing at some of the major damage sites in parallel to the track testing and commissioning work.

In addition to our cyclone recovery work, NZ Upgrade Programme funded track upgrade work (to allow 18-tonne axle loads) on the line north of Whangārei to Kauri, where Fonterra has a dairy plant, is complete.

Work has also been completed upgrading the track in the Whangārei Rail Yard to take 18-tonne axle loads and work has commenced to reconstruct the hardstand surface of the container terminal. We are also doing work to improve drainage and flood management in the yard, which will help protect the surrounding community. As with the upgrade work to Kauri, getting this work done before the NAL reopens reduces any further disruption for customers.



147km rebuild nearing completion, where a huge slip below the rail line caused a 100-metre embankment to fail. About 21,000 cubic metres of saturated material had to be excavated and the embankment rebuilt.



The site in February.



Northland Major Damage Sites

Works Map 2023-2024



Damaged Sites Key

1	34km: A major slip at the north end of a rail tunnel. COMPLETE
2	71km: A 15-metre long landslide (underslip) beside the track, above the Kaukapakapa River. COMPLETE
3	78km: A 20-metre long underslip beside the track. COMPLETE
4 - 19	85 - 99km: 16 sites including embankment collapses beneath the tracks and some slips above the tracks (overslips). In this area there was also the 35,000 cubic metre Tahekeroa slip and some other nearby slips, which were repaired in September. TRACK REINSTATED / SOME ONGOING WORK
20 - 25	104 - 113km: 6 sites including underslips, overslips and bridge damage. COMPLETE
26 - 30	118 - 136km: 2 large sites where the track has slumped and 3 slip sites. TRACK REINSTATED / SOME ONGOING WORK
31	147km: A huge slip below the rail line where a 100-metre length of embankment failed. About 21,000 cubic metres of saturated material, 8-metres deep has had to be excavated before the embankment can be rebuilt. TRACK REINSTATED / SOME ONGOING WORK
32	152km: 13-metre long unstable slope above the track. COMPLETE
33	160km: 15-metre long shallow landslide, that starts 50 metres from the track. COMPLETE
34	185km: An example of Northland's slip prone geology, where a gentle hillside slumped under the rail line. It has required major excavation and drainage work beneath the tracks and is being rebuilt with sturdier materials. TRACK REINSTATED / SOME ONGOING WORK
35	223km: Major slip south of Kauri. WORK ONGOING

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