



# September/October 2023 Northland Rail Programme

Kia ora

We are continuing to make progress on repairing the North Auckland Line after it was badly damaged in the late January weather event and again in Cyclone Gabrielle.

We have completed work fixing the massive 35,000m<sup>3</sup> slip at Tahekeroa, north of Auckland, which fell across the road and rail line and the road has been reopened.

This was a major undertaking, and I want to thank the KiwiRail project team, as well as Auckland Transport and our main contractor Downers. The work was often done in difficult conditions, as it continued raining over the last few months.

We have done more than just rebuilt what was there. We've re-engineered the area to improve drainage and significantly improve resilience, in case of future weather events.

The new road is raised more than four metres, with large culverts that run underneath into a basin area, and another set of culverts under the rail line. Not only will this enable water to flow quickly away from the site, but if there is another slip the raised road will act as a barrier and the basin will be able to capture slip material before it reaches the rail line.

We were able to re-use 95 per cent of the slip material on site – removing the need for thousands of truck trips, which would have damaged local roads, caused traffic problems and added to transport emissions.

The NAL is the only rail route into Northland and plays an important role moving freight to and from the region. Just before the January weather event KiwiRail had finished upgrading the line so that heavier trains could run on it. We

want to grow rail freight in Northland to help get trucks off roads, making them safer for other users, while also reducing transport emissions. This additional protection for the rail line at Tahekeroa will help ensure resilience.

We have also completed our upgrade work of the line north of Whangārei to Kauri – laying 20,000 new concrete sleepers and 13km of rail and raising its ability to take larger trains.

Finishing that work allows us to completely focus on repairing numerous moderate to significant damage sites along the 180km rail line between Swanson and Whangārei. We're gearing up to start work and expect to have spades in the ground later this month.

The Government has recently allocated more than \$50 million in additional funding for resilience improvements on the NAL. This will include work in areas that were not damaged in this year's extreme weather events but could be in future ones. It's about reducing the risk of the line – which is an important freight connection to and from Northland - being closed. The work will include installing larger culverts and strengthening embankments, and will be carried out while we repair the weather damage.

Given the amount of work to do we currently expect the NAL to remain closed until early 2024. Thank you for your continued understanding and support.

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

**Eric Hennephof**  
Northland Rail Upgrade Programme Director

## Tahekeroa construction facts

- reusing 95 per cent of the slip material to stabilise the area – avoiding emissions, congestion and road wear and tear from more than 6,000 truck trips to landfill
- the new 4 metre-high road embankment is made up of this re-purposed landslide material
- taken more than 26 weeks and 13,000 staff hours to repair



*The 390m long slip at Tahekeroa – before and after*





*Rail line north of Tahekeroa, at the base of a large slip. We need to understand what is happening below ground.*

## Progress repairing the North Auckland Line

There were more than 200 damage sites along the NAL, including overslips, slumps, washouts and underslips. Ongoing weather has seen some sites worsen.

We've finished repairing more than 50 kilometres of line north of Swanson (to near Makarau), including repairs to significant washouts in north Auckland. The major Tahekeroa slip, and some other slips in the area have also been repaired.

Numerous minor damage sites have been repaired and assessed. We've appointed seven contractors (covering 15 construction packages) to repair more than 100 moderate damage sites.

Engineering and design work on more than 30 significant damage sites is expected to be completed in December, allowing us to take full advantage of the usual Christmas/ New Year rail shutdown to progress these repairs.

Most of the damage sites are not as dramatic as the Tahekeroa slip. At first glance the rail line can look okay, but it's what is happening in the wider environment and under the ground that is concerning.

There is a lot of damage on a 30km stretch of line north of Kaukapakapa, where the geology is fragile. In this area there are 20 major damage sites and 23 minor to

moderate sites alone.

While the rail line 2km north of Tahekeroa only looks slightly lumpy, with a kink, it is actually at the bottom of a large slip. Before we can make any repairs, we need to understand what is happening with the slip and whether the earth movement continues under the line so that heavy freight trains won't make it worse. We have undertaken a lot of core sampling to understand the geology and are designing an engineering response that will ensure safety.

A few kilometres further to the north, we have a different problem. We are dealing with a series of slips underneath the edge of the rail corridor, which drop down steep slopes and pose a significant risk for any freight trains. To repair and make these sites safe will require either rebuilding the hillsides or building massive retaining walls.



*Further up the line – slips underneath the rail corridor. We will need to rebuild the hillside or put in massive retaining walls.*