

Cyclone Gabrielle Recovery Activity

Minister's Weekly Update

19 May 2023



Waka Kotahi three phase response to the impacts of Cyclone Gabrielle

Phase	Description	Current state
One: Emergency Response	Open temporary emergency access and lifelines to affected and isolated communities. Some customer access is likely to be restricted, for example, freight.	State Highway 25A in the Coromandel is the only part of the network that is still closed due to damage caused by Cyclone Gabrielle. Note: State Highway 2, from Napier through to Wairoa, is now open with daylight restrictions (7am to 6pm) in place.
Two: Providing access for communities	Once lifeline connections are established, start to lift the level of service to support community access. This includes assessment, stabilisation, minor works and some maintenance.	A full assessment is commencing on all corridors that were affected. Maintenance and Operations teams are continuing to repair at risk sites, while rebuild strategic planning is underway.
Three: Rebuild and betterment for the long term	Undertaking permanent rebuild alongside our partners.	Strategic Planning is underway for three regions – Northland, Coromandel and East Coast – and is expected to be completed by July 2023.

Waka Kotahi has prepared [State Highway Access Maps](#) showing the key areas where restrictions apply and general advice on the length of time for repairs. These maps are updated three times per week (Monday, Wednesday, and Friday) until further notice.

Road status - Key operational progress updates

Overall



RAG status (arrow) colour shows status and the arrow direction shows change from the last report.

Northland

- **State Highway 1, Mangamuka Gorge**, had 380 millimetres of rain during the week ending 19 May 2023. The new slip that appeared last week, which is 50 metres from the summit on the Northern side, has become more active. A review for the site will be completed by the end of May 2023 to look at the right interventions. There are five other critical slip sites in the Mangamuka Gorge that will be managed under the Northland recovery programme.
- **State Highway 1, Brynderwyns**, work is progressing well at all the sites.
- Work continues on the Waverly Valley D4 site on **State Highway 1, Dome Valley**, where wailer beams are being galvanized and anchors are being completed. Work on this site is scheduled to be completed during the week ending 26 May 2023. Design work is underway at other sites and is progressing well.

Coromandel

- Physical works continue on the under slip on **State Highway 25, Opoutere-McBeth**. Weather permitting, we expect works to be completed and the road fully opened for both heavy and light vehicles in June 2023.
- **State Highway 25A, Kopu to Hikuai**, remains closed to all vehicles until further notice. The confirmed solution to repair the 110-metre slip on State Highway 25A will be a bridge. We are currently preparing a business case to support additional resilience and corridor improvements, that can be undertaken while State Highway 25A is closed.

Tairāwhiti

- There has been a delay to the **Hikuwai Bailey bridge** due to ground conditions on the southern abutment. Geotechnical assessments indicated that hard ground was to be expected at 15 metres, however the piles only found hard ground at 32 metres. This has caused a delay of six to eight days, which has the bridge opening in June 2023. Our contractor is focused on all critical path activities to have the bridge open as soon as possible.
- **State Highway 35** remains open with access past the damaged Hikuwai bridge via a local road, and past the Mangahauini Gorge via the constructed bypass road. The network remains fragile, and we continue to monitor for any changes with weather events.

¹ Foamed bitumen stabilisation (FBS) involves in situ stabilisation of pavement materials with bitumen as the primary binder. The process is used to improve the strength of granular materials, while retaining a flexible pavement. The advantage of FBS is that it's more resistant to moisture once compacted and it can be opened to traffic much earlier than cement bound products.

Road status - Key operational progress updates

Overall



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Tairāwhiti continued

- Foamed bitumen¹ pavement work on **State Highway 2, Waioeka Gorge**, is progressing well. Two of ten sites are complete with minimal interruptions to traffic. Work on the third site started on 15 May 2023.

Hawke's Bay

- On **State Highway 2, between Napier and Wairoa**, the Waikare Bailey bridge has been blessed and is now open to traffic, with daylight restrictions (7am to 6pm) in place. The Bailey bridge has a 10 kilometre per hour speed limit in place. The bridge will 'deflect' or 'sag' when vehicles drive over it, which is expected.
- Emergency works along **State Highway 5** continue to progress, with favourable weather conditions in Hawke's Bay recently. Work on the large drop out between Te Pōhue and Glengarry is being filled and we now expect to have this section of the road restored by the end of June 2023. A second drop-out near Glengarry will be repaired by the end of July 2023.

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Collaborative Delivery Model / Strategic Planning

Collaborative Delivery Model

- We have met with local contractors and consultants over the last week in Tairāwhiti, Wairoa and Napier. The sessions have sought local feedback on capability and capacity, and opportunities to involve contractors early in the establishment of the full Alliance. We are currently working through the three-month establishment period and the longer-term delivery framework.
- We are confirming the design related roles required within the region (for example, surveying and geotechnical roles), and those that can be resourced by a back-office function (for example, retaining wall and pavement designers).

Strategic Recovery Framework

- The Resilience Strategic Approach planning activity that is underway for Northland, Coromandel and the East Coast is aligned to Waka Kotahi's draft Strategic Recovery Framework. It guides the overall approach to recovery from disruptions, such as severe weather, and supports improving resilience.
- The framework will also help identify the appropriate level of service required for the corridors and long-term access requirements. The framework is currently under development and future engagement is planned.

East Coast - Tairāwhiti/Wairoa

- The Tairāwhiti/Wairoa Resilience Strategic Approach planning is currently in week nine of the 12-week project.
- The focus for the week ending 19 May 2023 has been developing the programmes for each corridor and staging options (State Highway 2, State Highway 35 and State Highway 38).

East Coast - Hawke's Bay

- Hawke's Bay Resilience Strategic Approach planning is currently in week three of the 12-week project.
- The team have developed a draft Investment Logic Mapping (ILM) and Key Issues note. The first governance group meeting and ILM workshop were held on 18 May 2023.

Strategic Planning continued

Coromandel / Hauraki

- The project team is now in week three of the programme and visited the Coromandel and Hauraki during the week ending 19 May 2023.
- Initial and subsequent face-to-face meetings with local councils and Iwi groups took place during the week ending 19 May 2023, as well as a site visit of the wider state highway network.
- The project team is preparing for the first of four workshops, which will take place during the week ending 26 May 2023 in Thames. The workshop will primarily cover the project context and scope, issue mapping, outlining of evidence, and confirming key issues (cause and effect) and benefits (that is, the ILM).
- Workshops two, three, and four will be held in the preceding weeks.

Northland

- A project team has been established for the Brynderwyn Resilience Strategic Approach work.
- A point of entry, including scope, was submitted for funding during the week ending 12 May 2023.
- This work will identify options for resilience works in the short, medium and long term.
- Local council(s), as well as iwi, will be engaged during this stage of the plan. Project Plans and programme are under development.

Iwi engagement

Tairāwhiti Wairoa Resilience Strategic Response (RSP)

- Our Pou Ārahi was in the region during the week ending 19 May 2023 to re-engage kanohi ki te kanohi.
- Te Aitanga ā Māhaki and Ngāi Tāmanuhiri have advised that Waka Kotahi needs to clearly outline how the recovery and rebuild could economically and socially benefit their people. Work is underway on this.
- The next stage of engagement will be detailed in the coming weeks, this includes extra resource on the ground to assist with iwi engagement, specifically related to the recovery/rebuild on the East Coast.

Other Strategic Response Projects

- We continue to engage with Ngāti Maru in the Coromandel, particularly regarding the State Highway 25A, Taparahi slip site.
- With the Hawke's Bay and Coromandel strategic workstreams underway, formal engagement will commence in the near future in these regions.
- This will be closely followed by the Brynderwyn strategic work commencing, along with related engagement.

Bailey Bridges

Once all commitments are met, Waka Kotahi will be left with five 30-metre Bailey bridges for the entire country. We need to replenish our spare stock with at least ten 30-metre bridges in each of our North and South Island yards. We have expedited the repair of broken stock to try and bring our levels back up, at an estimated cost of \$2.2 million. We are also looking to add new stock soon.

NEMA PRIORITISED BAILEY BRIDGES AND STATUS			
Bridge & Name	Road Controlling Authority	Status	Bailey Bridge Opening
Opoiti Bridge on Tiniroto Road	Waikato District Council	Bridge installation completed	23 February
Rissington Bridge on Puketitiri Road	Hastings District Council	Bridge installation completed	31 March
Makiekie (Coal) Creek Bridge on Pohangina Road	Manawatu District Council	Bridge installation completed	21 April
SH2 Waikare River Bridge	Waka Kotahi, Hawke's Bay	Bridge installation completed	14 May
SH35 Hikuwai No. 1 Bridge	Waka Kotahi, Gisborne	Physical works underway	Early June
Whanawhana Bridge on Whanawhana Road	Hastings District Council	Bridge installation completed	15 May
Moeangiangi Bridge on Waikare Rd	Hastings District Council	Site investigation and design underway.	End of May
Mangatutu Low Level Bridge on Mangatutu Road	Hastings District Council	Site investigation and design underway.	End of May
Ellis-Wallace Bridge on Ellis Wallace Road	Hastings District Council	Design complete, physical works due to commence shortly	End of May
Hollywood Bridge on Bushy Knoll Road	Gisborne District Council	Mabey Bridge will be used due to span required	End of June
Te Reinga Bridge on Ruakitura Road	Waikato District Council	Existing bridge to be demolished. Staging works to enable demolition and then reconstruction to be installed. Single span Bailey between the staging works to be installed.	Beginning of June

Bridge Name	Road Controlling Authority	Reason bailey bridge not required
Arapaoanui low level bridge	Hastings District Council	RCA advised that alternative solution was being pursued.
Dartmoor bridge	Hastings District Council	Staging. (Class 1 / General access traffic loading)
Matapiro bridge	Hastings District Council	Temporary access established. Options being confirmed for the permanent structure.
Crownthorpe bridge	Hastings District Council	RCA advised that alternative solution was being pursued.
Brookfield Bridge	Hastings District Council	Resilience options for determining the outcome.
Te Puna bridge	Hastings District Council	RCA advised that alternative solution was being pursued.
Puketapu bridge	Hastings District Council	Proposing solutions for access
Darkeys Spur no.1 bridge	Hastings District Council	Large scale works required
Mclvars culvert	Hastings District Council	Temp access established. Permanent solution initiated for resilience.

Funding update at 17 May 2023

Initial response

Update on funding approvals and amounts claimed:

\$million	Approved as at 8 May 2023 (funding allocated for specific activity)	Approved as at 15 May 2023 (funding allocated for specific activity)	Change since previous week	Claimed as at 8 May 2023 (accrued commitments/ payments made)	Claimed as at 15 May 2023 (accrued commitments/ payments made)	Change since previous week
Local Roads	201	201	0	84.8	102.0	17.2
State Highways	82.5 (est.)	82.5 (est.)	0	45.3	45.3	0
TOTAL	283.5 (est.)	283.5 (est.)	0	130.1	147.3	17.2

Key Points

- The largest local roads claims for the week ending 19 May 2023 were from Hastings District Council (\$10.7 million) and Thames-Coromandel District Council (\$3.7 million).
- Approximately \$2.4 million of further requests are currently under review and not included in the above approved local road totals. These pending approvals are expected to be approved in the next week. Requests still in draft include Kaipara District Council (\$7.9 million) and Ruapehu District Council (\$1.2 million).
- Local road approvals display a significant optimism bias in terms of capacity to deliver. Based on spend to date, it is expected that the actual expenditure in 2022/23 will be in the range of \$140 million to \$170 million.
- Waka Kotahi is continuing to finalise its cost estimates for the initial response works on the state highway network, with applications for North Island Weather Events funding received for the Auckland and Waikato regions.

Note: all costs are NLTF share only

Updated Recovery and Rebuild Cost Estimates

- The following slides provide our latest estimated costs for the recovery and rebuild of the state highway network after the Cyclone Gabrielle event. The estimates provide an indicative cost of the Recovery and Rebuild activity required for state highways in Northland, Coromandel and the East Coast. These costs are still high-level estimates, with full solution designs or investigations to follow.
- As the recovery of KiwiRail's Napier to Wairoa line is to be undertaken by the East Coast Recovery Alliance, a high level estimate for that has also been provided.
- s 9(2)(f)(iv)
- The definition for recovery is to get state highways back to the previous condition, acknowledging that the level of service on some corridors was well below that required for lifeline connections, given the increased intensity of regional events. It excludes response activity, which was focused on re-establishing safe connectivity. There may be a grey area between response and recovery where we have had to build retaining walls to be able to restore access, for example, State Highway 25, Raglan.
- The definition for rebuild is improving the level of service more appropriate for state highway corridors. Whilst still working through the strategic assessments for the three regions to ensure all options are being adequately tested, we have a good understanding of where the most significant rebuild activity will be recommended and this has been captured in the estimates. The strategic assessments and cases will be available between July and August 2023, but will still be high level assessments until more detailed design work can be undertaken.

National Recovery Estimate

- Recovery estimate for state highways - we have undertaken inspections of the network affected by Cyclone Gabrielle and identified 227 network faults and 132 slips, with the remainder being pavement, culvert, bridge, barrier, or other state highway asset related damage.
- We have undertaken a qualitative based assessment and our current estimate to repair the damage is approximately s 9(2)(f)(iv) This figure will likely change as our understanding of ground conditions and extent of damage at each individual site is fully understood:
 - s 9(2)(f)(iv) for the East Coast
 - for the Coromandel
 - or Northland
- These works are likely to take 12 to 18 months to be completed.

East Coast Rebuild Estimates

The current estimate for the East Coast is s 9(2)(f)(iv) including KiwiRail)

State Highway 2 s 9(2)(f)(iv)

- State Highway 2 – Building resilience along the entire State Highway 2 corridor, between Opotiki and Hastings, with major rebuild works between Wairoa and Napier (involving two possible re-alignments at Devils Elbow and Waikare Gorge).

State Highway 35 - s 9(2)(f)(iv)

- State Highway 35, from Opotiki to Gisborne. There are resilience challenges along the entire corridor. Major works will be required between Te Puia Springs and Gisborne (at the Hikuwai Bridge site) and Maungahauini Gorge. Significant work is required to mitigate slash risk around bridges and a new alignment for the Gorge is possible.

State Highway 5 s 9(2)(f)(iv)

- The resilience of State Highway 5 requires significant improvements to improve the reliability of the corridor, particularly in the Napier section through Esk Valley while the corridor is likely to require raising or realignment. Other resilience risks exist along the corridor, which will be considered, for example, Mohaka Bridge

Alternate routes - s 9(2)(f)(iv)

- State Highway 38, Tiniroro Road (between Gisborne and Wairoa) and the Taihape (to Napier) Road, also suffered significant damage and should be considered for resilience work as possible alternate routes for interim events while we build back resilience into State Highway 2, or for system resilience for another significant event (such as a tsunami or earthquake).

KiwiRail - s 9(2)(f)(iv)

- This is Waka Kotahi's estimate to reinstate the Napier to Wairoa KiwiRail connection.

Northland and Coromandel Cost Estimates

Northland

The current estimate for Northland is s 9(2)(f)(iv)

- State Highway 1, Brynderwyn's, s 9(2)(b)(ii)
- The Brynderwyn section of road is prone to slips and continual land movement and will require realignment to achieve the required level of service for State Highway 1.
- In addition, resilience work is required within Dome Valley and the alternate corridors (State Highway 12 and 14), and local roads, which get significant use when State Highway 1 is closed.
- We believe both interventions are required as a major realignment of State Highway 1 through the Brynderwyn's is likely to take between 5 to 10 years.

Coromandel

The current estimate for Coromandel is s 9(2)(f)(iv)

- For the Coromandel, we want to undertake some rebuild activity on State Highway 25A while the bridge is being built – while we are working through the design currently, we are estimating the cost to be s 9(2)(f)(iv) for the corridor (including the bridge).
- There will be rebuild activity on State Highway 2 to improve reliability of the section between Paeroa and Waihi, State Highway 25 around the Peninsula, and local roads.

Weather events response and recovery communications and engagement

WHAT'S HAPPENED: 13-19 MAY



NATIONAL

- Key messaging + state highway access maps updated - sent internally
- Te Arawhiti content request for Ngati Porou summit
- Local contractor meetings in Tairāwhiti, Wairoa + Napier
- Kia Marāma industry newsletter expected to be sent Fri 19 May to subscribers, including all interested and key industry stakeholders
- Budget recovery funding article in fortnightly Transport Services newsletter

RISKS:

- *iwi/Māori in impacted regions are limited in capacity to engage with government*
- *Resourcing comms and engagement to ensure success – currently being worked on*



NORTHLAND



NOTE: *comms + engagement activity has moved to another phase now Brynderwyns is open – information below covers the month of May (or by exception)*

Brynderwyns

- SH1 Brynderwyn Hills is open
- No further comms planned

Mangamuka Gorge

- Social media
- Monthly e-newsletter; weekly hapū meetings
- Key stakeholder, elected reps + hapū geotechnical background presentation
- Stakeholder workshop for Mangamuka Network Resilience Programme Business Case
- Update drone video + progress images on website
- Direct stakeholder, elected reps + hapū communications



WAIKATO

SH25 and SH25A Coromandel

- Resilience Strategic Response (RSR) engagement started
- Ongoing weekly comms
- Weekly Coromandel FM interview + Ministerial responses

SH31 Kāwhia

- Opened to two lanes Tues 16 May

RISKS: *SH25A managing expectations; ongoing SH25 vulnerability, including speed limits*



TAIRĀWHITI/WAIROA /HAWKE'S BAY

- Blessing ceremony to open SH2 + Waikare Gorge Bailey Bridge on Sat 13 May. Ngāti Pāhauwera + Maungahuru Tangitū Trust shared the karakia. Attended by council reps, iwi, local leaders + media.
- Media mostly about the reopening of SH2 + strategic resilience approach
- Local government update to Hawke's Bay + Tairāwhiti Mayors + council CEs + iwi by Linda (DRR) – also went to Minister Wood + Allan
- Connecting Tairāwhiti e-newsletter out to around 400 subscribers
- Hawke's Bay recovery e-newsletter sent + ongoing will move to monthly
- Met with Hawke's Bay regional recovery communications working group Tues 16 May (weekly).
- Strategic Resilience Recovery Plan update to SH5 Programme Business Case Reference group Thurs 18 May.
- First Hawke's Bay Strategic Resilience Recovery ILM workshop with local government partners held Thurs 18 May.

RISKS:

- *Speed of strategic resilience recovery plans raises comms and engagement risks with iwi potentially under resourced + stretched when our desire is to work in true partnership*

WHAT'S COMING UP: 20-26 MAY



- Update and share messaging (Tuesday)
- ELT video: recovery update
- OnRamp programme page to update



SH25 and SH25A Coromandel

- RSR workshop 1, 25 May
- Cross-government agency comms team meeting
- Ongoing weekly comms + preparations for contract award



- Ngāti Hineuru invited Waka Kotahi to hui on SH5 on Sat 27 May about road safety + resilience
- Work on the Strategic Resilience Recovery Plan
- SH2 asphaltting work
- Hikuwai #1 Bailey Bridge launch