



Extreme Weather Event Nelson/Tasman/Marlborough

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Are you prepared for the unexpected?



Statistics

- Nelson received 1,000 mm in four days
- Civil Defence Emergency was declared on 18 August 2022. Lifted 31 August 2022.
- Nelson City – Red placards 89; Yellow placards 89; 450 plus slips & counting
- Tasman District – Red placards 3; Yellow placards 13
- MDC – Red placards 30; Yellow placards 58; 3,000 slips/drop-outs
- Major damage to lifelines infrastructure



Over 1,200 people evacuated





NO LOSS OF LIFE !!!!!



Maitai River in flood





Statistics

- Maitai River has a base flow of around 2m³/s
- Peaked to 460m³/s in about 30 min
- Three separate events in 3 consecutive days
- Record flow
- Flow in upper catchment equated to between a Q80 and Q100 event
- 6,000 tonnes of gravel removed and ongoing







Local Nelson City Infrastructure





During









Access road to our Dam – one of many





Waka Kotahi State Highway Network

- At one point all State Highways into Nelson/Tasman were compromised – SH63 & SH6
- SH60 (Nelson to Golden Bay) closed at multiple locations
- SH63 still closed at St Arnaud



SH6 (Rai Valley to Nelson)

- Numerous slips
- Road reopened 31 August 2022
- Last 5 days over 70 staff onsite each day
- 4,000 labour hours worked in the last 7 days
- 12,000 tonne of spoil removed - 12,000 tonne hardfill imported
- 300 tonne of asphalt laid
- 6 x 30 tonne articulated dump trucks on site with 10 diggers (14 to 40 tonne)
- Further closures required (Dec) to address current width restrictions



















SH6 Rocks Road

- Slips above the road in the cliffs area and movement of the Tahunanui Slump necessitated closure.
- Staged re-opening
 - Northbound one lane only (no pedestrians and cyclists)
 - Reopened 25 August with the exception of southbound cyclists.
- Ongoing daily slump monitoring to ensure road user safety





SH60 Takaka Hill

- A number of small slips necessitating single lane closures.
- SH60 Birds Hill
 - Large underslip
 - Single lane light vehicle access
 - Key lifelines infrastructure (fibre cable)





Key lessons learnt

- Know who to contact and make sure contact numbers are up to date
- Know capabilities of contractors
- Develop and maintain key relationships
 - Waka Kotahi
 - Civil Contractors New Zealand
 - Consultants
- Know capabilities of geotechnical consultants and have structure to manage multiple sites



Importance of the Roading Network

- Storms like this will be our new reality
- Climate change is real
- NCC / TDC have no rail
- Roading network is key to top of the south's economic and social prosperity