



**Christchurch City Council
MINUTES ATTACHMENTS**

Date: Thursday 3 June 2021
Time: 9.30am
Venue: Council Chambers, Civic Offices,
53 Hereford Street, Christchurch

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Flood Event - Canterbury

May / June 2021

Presentation

- Overview of event, including
 - Impact in Canterbury
 - Impact in Christchurch
- Preparedness
- Response
- Resilience in network
- Critical Factors

Overview of Event

- Early warning Monday 24th May
- MetService issued a red alert for heavy rainfall in Canterbury on Friday 28th May
- Shortly after midnight on Saturday 30th May concerns were raised around rising river levels and Canterbury flood rooms were activated.
- By mid-Saturday the situation had worsened, Selwyn, Ashburton and Timaru declared a state of emergency.
- Local state of emergency declared in Canterbury at 1645 on Sunday 30 May 2021

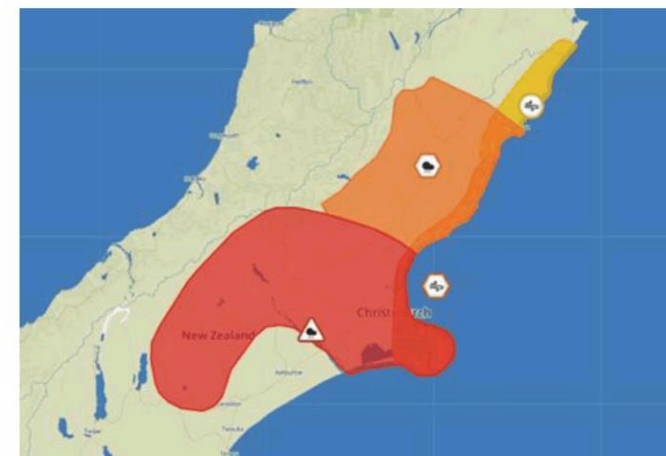
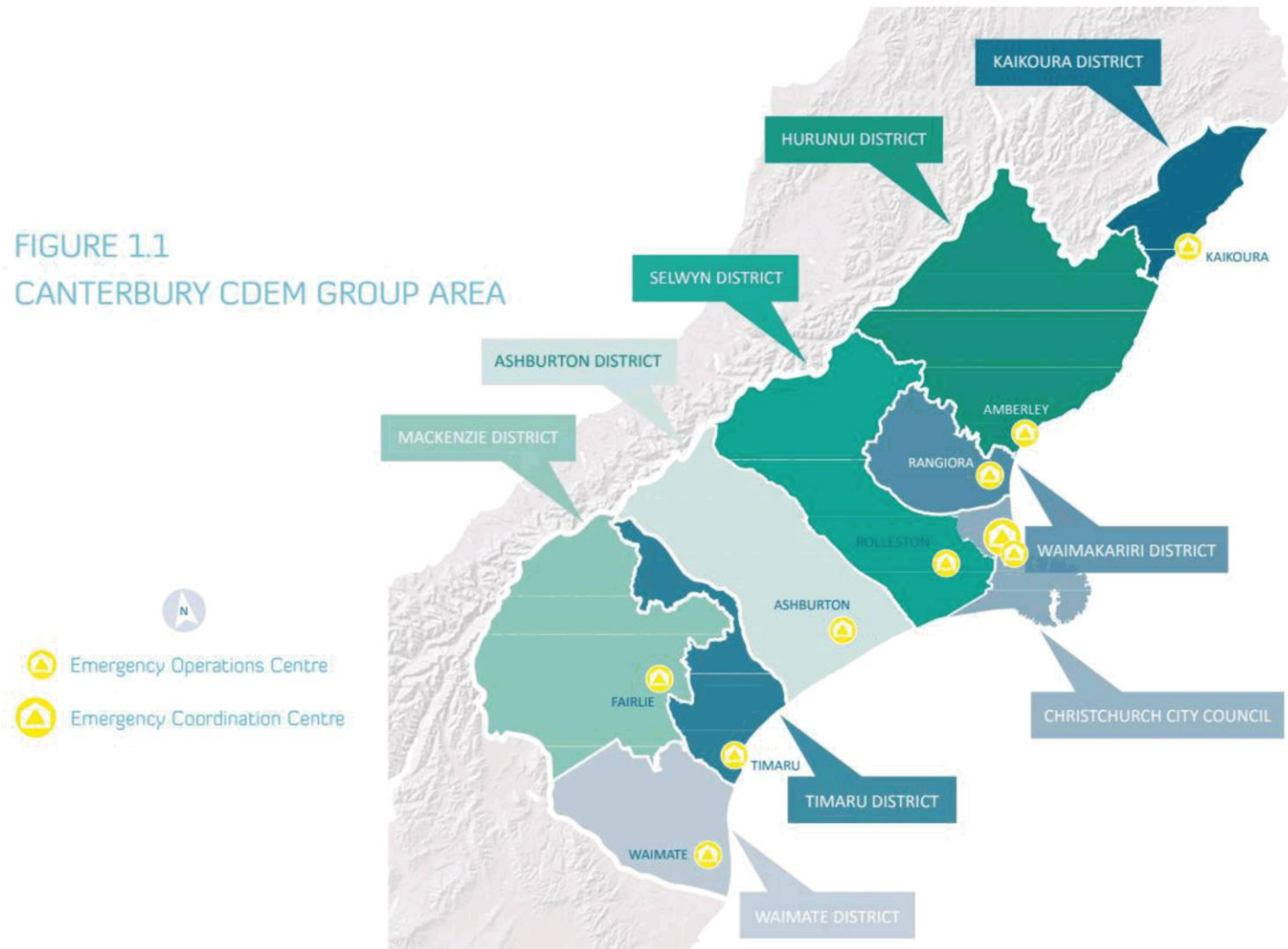


FIGURE 1.1
CANTERBURY CDEM GROUP AREA



Impacts in Canterbury summary:

- Biggest flood on record for the Ashley River at the Gorge
- Biggest flood on record for the Ashburton at SH1
- Largest 24-hour event on record for most of our foothills rain gauges

- Widespread infrastructure damage, including slips, bridges, roads and private properties
- A number of evacuations undertaken overnight Sunday 30th May to Monday 31st May.
- Displaced people accounted for and are in designated welfare centres or with friends/family
- Reports of several large high-country stations being cut off

- Annual stock movements impacted by the wide-ranging road closures in mid/south Canterbury
- Issues remain around low level of stock feed - Canterbury farmers were in long-standing drought conditions.
- Reports of several large high-country stations being cut off

Situation report (Canterbury):

- Heavy focus on assessing roads, and possible routing options given widespread impacts to the roading network in Canterbury
 - Ashburton SH1 bridge - further heavy vehicle testing to occur between 1800-2000 tonight. Decision on weight limits expected by 1000 THU 03 JUN.
 - SH1 Hinds opened 1600 WED 02 JUN
 - Porters pass (possible Thursday opening one-lane); Hinds river bridge
 - Orari is now back in main stream - maybe some residual water still to flow down Coopers Creek system.
- On-going monitoring of roads, bridges and stop banks continue
- South rail line being inspected, may be open by close-of-business Friday
- Communication network – critical repairs & some network restrictions
- Impact assessment is underway as shift to recovery progresses
- Water – boil water notices

Christchurch Impact

- Rainfall was accompanied by four significant king tide events
- While significant rain fell over the region, Christchurch was spared the significant effects and damage caused in other areas.
- City rainfall was of a lower intensity and with lower volumes than those experienced elsewhere.
- Banks Peninsula experienced larger rainfalls (Little River in particular).

Christchurch Impact cont

- During the event, lower reaches of rivers and other tidal areas showed significant flooding.
- Several roads were closed.
- While there was some flooding on properties and inside garages, there have been no reports of flooding above floor level in homes.



Streets off Avonside Drive

Council Preparedness and Planning

- On watch from Monday 24th
- Wednesday 26th activated according to the City Wide Wet Weather & Tidal Response Plan.
- Land drainage and transport key actions included:
 - grille clearing,
 - pump deployment,
 - outfall excavation,
 - communication to the public,
 - co-ordination with other Council teams,
 - communication with Civil Defence,
 - contractor resourcing/preparation
- Water supply and Waste water preparedness

Council Preparedness and Planning (2)

- Pumps deployed on Maces Road, Bromley area, Tern Street, Rockinghorse Road and Ebbtide Streets in New Brighton, and in the Flockton area.
- Outfalls cleared at Sumner, Southshore and New Brighton beach to ensure maximum efficiency of the stormwater network.
- Transport team setup signage at key locations in preparation for any road closures / warnings.
- Requests for service routed through our call centre - to monitor and prioritise our response appropriately.
- Checked levels in Waiwera

Council Response

- Numerous responses to incidents
- Call centre – service request, information and reassurance
- Contractors dealt with the minor operational issues
- Numerous road closures.
- Monitoring retention basins - releasing some of the stored water on the outgoing tides.
- Release water from Wairewa
- Key messages to staff and community
- Rangers deployed to Banks Peninsula, including Port Levy

CDEM Response

- CDEM stood-up Saturday night
- Response Team deployed
 - Sunday morning & during day
 - Sunday & Monday night targeted door knocking
 - Banks Peninsula Monday
- Response Team deployed to Ashburton
- Staff in ECC to support region & Ashburton EOC



Avonside Drive



Resilience - Council flood mitigation

- Infrastructure functioned as designed
 - Flockton land drainage work
 - Dudley Creek projects
 - Retention basins Heathcote catchment
- Thanks to old Catchment Board for building stop banks

Dudley Creek Pumps



Wigram retention basin May 2021



Sutherlands Eastman retention basin



Sparks Henderson wetland



Heathcote River



Cashmere-Worsleys Basin



Critical Factors

- Early warning
- Preparation - City Wide Wet Weather & Tidal Response
- Coordinated Response
 - Across Council and contractors
 - Interagency collaboration
 - TA collaboration
- CDEM Response Teams
- Prevention and resilience
- Communication (internal and community facing)
- Call centre – service requests and queries
- Political support
- Far too much experience
- Learnt how network works