

SOUTHERN TASMANIA EXTREME WEATHER EVENT

**10 & 11 MAY
2018**

Geoff Lang

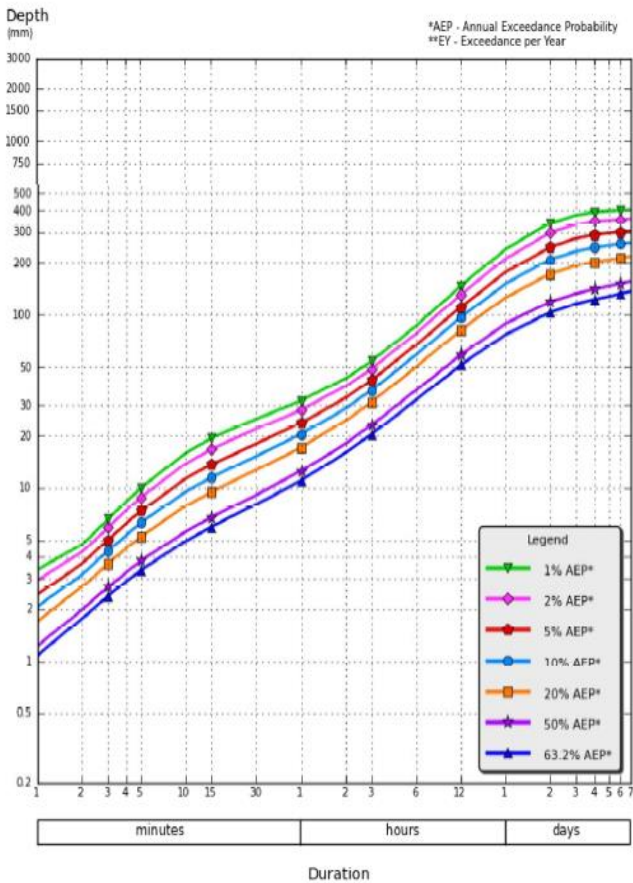
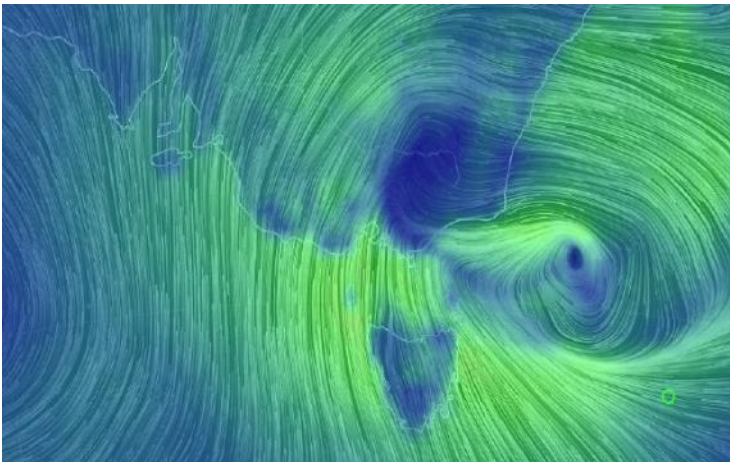
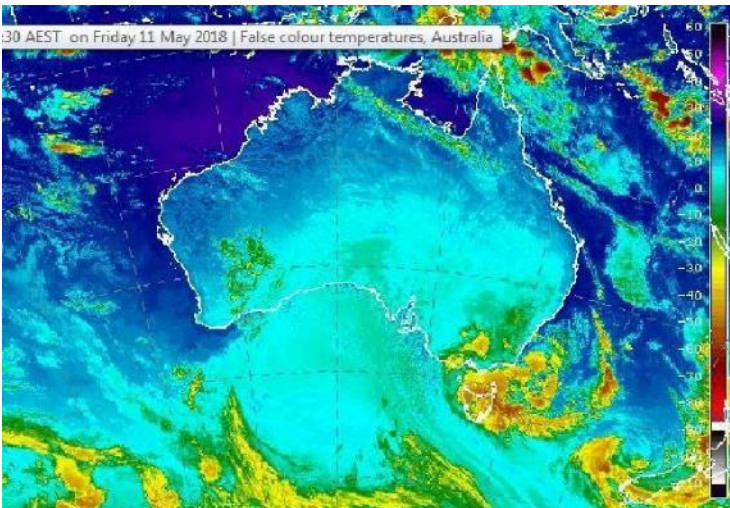


City of **HOBART**

Extreme Weather Event Summary

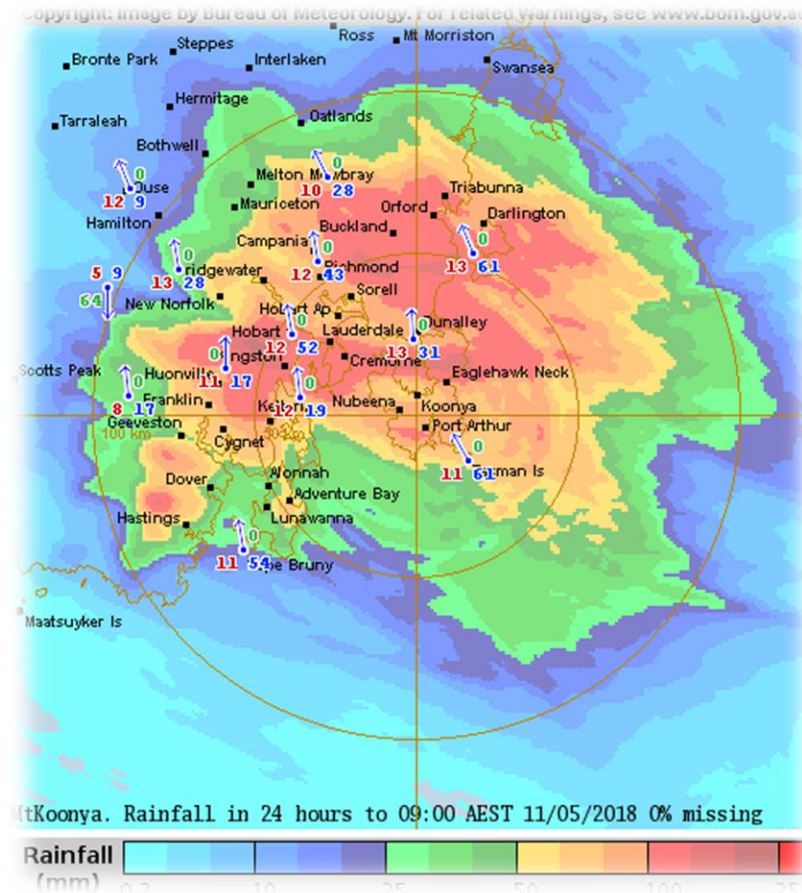
- **Event 'Name':** *Southern Tasmania Extreme Weather Event*
- *(STEWE)*
- **Event date:** 10 and 11 May 2018
- **LGAs affected:** Clarence, Derwent Valley, Glenorchy, Hobart, Huon Valley, Kingborough.
- Thunderstorm - Thursday 10 May into Friday 11 May 2018.
- Atmospheric River

THE STORM



Event Summary - Weather

Radar derived rainfall:
24 hour rainfall to 9am
11 May

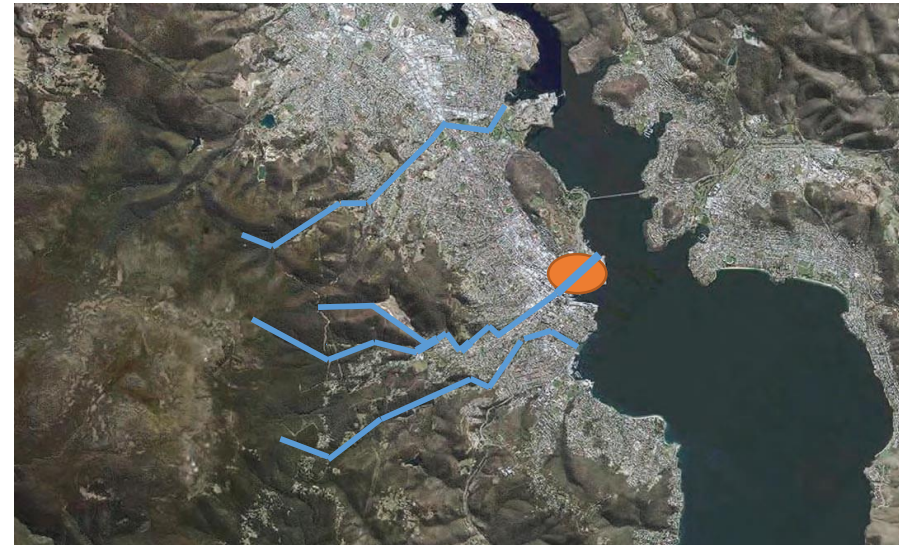


<http://www.theweatherchaser.com/radar-loop/IDR763-hobart-mt-koonya/2018-05-10-00/2018-05-11-15>

HOBART'S CATCHMENTS



City of **HOBART**



HOBART RIVULET



 **SUDDENLY, THE CITY WAS AWASH**



OTHER WATER COURSES



City of **HOBART**



ROAD DAMAGE



COUNCIL BUILDING DAMAGE



STORMWATER ASSETS DAMAGE



TUNNEL VISION: Engineers head underground into the Hobart Rivulet on the corner of Campbell and Collins streets to check for structural damage and blockages after floods caused significant damage throughout the city.

**ALEX LUTTRELL
and PATRICK GEE**

HOBART City Council engineers have found more than 500 tonnes of underground debris along the rivulet after the devastating floods that ripped through the capital almost two weeks ago.

Hobart Lord Mayor Ron Christie said engineers yesterday walked 2km along the Hobart Rivulet, starting below Campbell St, walking along the twin tunnels below the Brookier Highway and the Cenotaph, before finishing at Macquarie Wharf.

He said in two hours they estimated they found more than 500 tonnes of debris and sediment, tree branches, leaves, rocks and rubble.



FLOODING: The rivulet broke its banks during the storm.

"There was no structural damage, but they found tonnes of debris that will need to be extracted," Ald Christie said.

"They will assess [the debris] and then send in some small bobcats to clear the debris."

He said the weather had to be dry for the debris to be removed.

The Lord Mayor said the council's damage bill from the flood was a touch over \$20 million and it would make a claim to the State Government for

federal relief money this week. Crews are also working to re-open Pinnacle Rd on kunanyi/Mt Wellington.

"They are trying to resurface Pinnacle Rd to be able to get two cars past each other," Ald Christie said.

He said engineers put cameras under the road to check culverts and found three were damaged and needed repairs.

Lower walking tracks around the mountain were reopened late last week but the larger tracks have more significant damage.

Council general manager Nick Heath delivered a report about the flood damage at last night's council meeting.

Council properties damaged included YouthARC, City Hall, the Council Centre, the

Queenborough Oval clubrooms, Domain Athletics Centre building and the McKelvie Gully Waste Management Centre.

More than a dozen roads also need repairs around the city.

Ald Christie and Mr Heath have also spoken with Latrobe Mayor Peter Freshney and general manager Gerald Monson for advice about dealing with the flood.

Latrobe experienced serious flooding in 2016.

They discussed the importance of establishing a community recovery centre, ensuring a strategy was in place to measure the cost of damaged infrastructure, and a mechanism to deal with any insurance claims.



PARKS / BUSHLAND DAMAGE

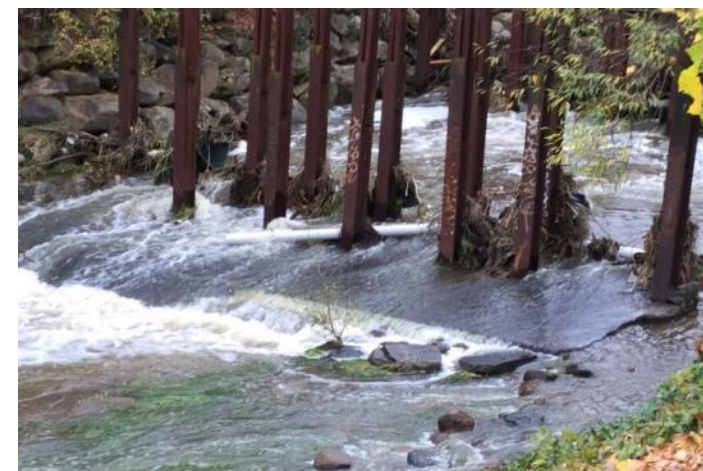


PRIVATE PROPERTY DAMAGE

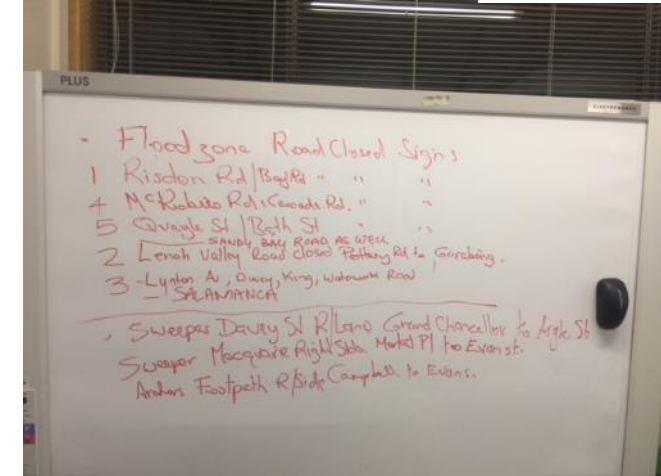
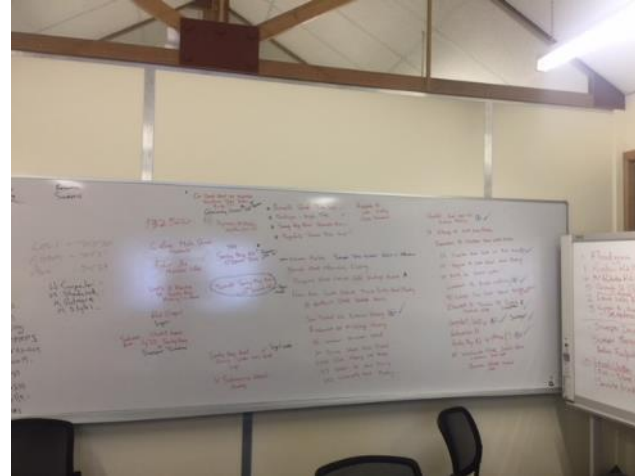


THE GOOD NEWS

- Lessons learnt from previous floods in 1960
- Hobart's CBD was kept safe
- Good work by Council crews / EM Plan kicked in
- Hobart Rivulet under the CBD – no damage
- No one died or was injured.



EMERGENCY RESPONSE



CLEAN UP & MAKING SAFE



INITIAL REPAIRS



City of **HOBART**



IMPACT ASSESSMENT



Damaged not habitable

Details

Condition
Damaged not habitable

Asset Type
Residential

Comment
Substantial flooding of house and yard/fences caused by creek overflow plus storm water back up overflow.

Structural Damage
Water inundation

Debris
Combination


Water Overflow
Storm Drain


Tree Threat
N/A

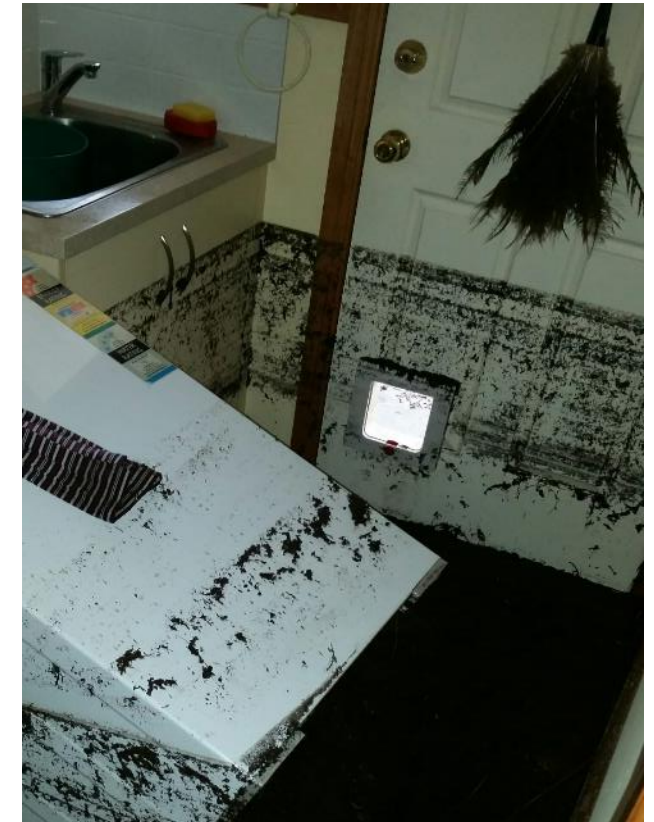
Vehicle Access
2WD

GLOBALID
{2C069441-B2B1-4DCF-B261-EF898E52F597}

Attachments

 attachment2.jpg
1 MB

Layers  Damaged not habitable



FINANCIAL IMPACTS

- City of Hobart - \$20M
- Reimbursement Federal Governments
- Natural Disaster Relief & Recovery
- 850 private commercial claims
- 8,300 private domestic claims
- \$100M in total



SOCIAL IMPACTS

- Communities isolated
- Personal losses
- Damage to community facilities
- Loss of power
- Businesses affected
- Residents still not back in their homes
- DPAC lead agent



COST RECOVERY

- Insured Assets
- NDRRA - Essential assets
- Non-essential assets
- Grey areas
- Community Recovery Grant
 - Resilience projects
 - Flood modelling



REVIEW OF THE EVENT



Group workshop

- Share learnings and observations in a positive and 'non-blaming' environment.
- Celebrate things that were done well.
- Identify opportunities for improvement.
- Capture and assign actions that need to be implemented immediately.



City of **HOBART**



OBSERVATIONS

- The Emergency Management structure was put in place
- Timing of the event reduced the potential consequences.
- Evacuation Centre
- Council was very effective in getting things 'back to normal' as quickly as possible.



LEARNINGS

- Resilient and robust communication and physical support systems.
- ‘Whole of organisation’ pre-established and robust processes
- Pre-establishment of accounting systems and cost codes.
- ‘Whole of organisation’ customer request system.
- Emergency management plans to interact with our business continuity plans.
- Single person dependency
- Climate change.



IMPROVEMENTS

- Emergency Management Working Group has undertaken a number of procedural and system improvements.
 - Greater preparedness in establishing the emergency management organisation.
 - Physical preparedness of our operation, coordination and recovery centres
 - New procedures.
 - Review of Evacuation and Recovery Centres
 - Continued training
 - Regular exercises.

WHERE TO FROM HERE?

- Implement Recommendations
- Ongoing Repairs
- Flood modelling
- Benefit / Cost Analysis
- Mitigation Works
- Do Nothing



THANK YOU

