

# The state-wide power outage that 'would never happen'







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- the context
- the event
- the fall out
- business continuity
- lessons







### The context

- preceded by multiple extreme weather events
- a year with a record number of requests for assistance
- saturated catchments
- agency and personnel fatigue in emergency services and support agencies
- ongoing post-event recovery operations











#### May 9

- •tidal inundation
- significant coastal damage
- damaging winds
- •1300 RFAs

#### 22-26 July

- severe winds
- •trees down
- power outages
- •flooding incl. Adelaide Hills
- •900 RFAs

#### Sept/Oct

- severe winds
- •state-wide power outage
- •flooding in most major catchments
- •4280 RFAs















#### 9-13 July

- damaging winds
- •many trees down
- power outages
- •record cold temps
- •3200 RFAs

#### mid-Sept

- widespread flooding in metro and Southern suburbs
- •1670 RFAs

Then...

- Murray River flooding
- •Large hail storm, damaging Riverland crops







## An unrealistic scenario

- state-wide blackout can't happen –
   exercise deemed unrealistic
- occurred just before peak hour in the CBD
- reduced telecommunications
- Parliament was sitting
- multiple impacts state-wide flooding, tornadoes, storm damage, tidal surge
- widespread damage coastal, community infrastructure,
- isolated communities
- new flood intelligence system and capability 'nearly ready'



































- people stuck in lifts
- emergency services diverted
- mobile phones go flat
- essential services in buildings
- traffic lights
- power to flood gauges out
- back-up power not working
- fuel pumps not working
- darkness in normally well-lit areas













Analysis & Opinion



#### SA weather: Embryos destroyed at Flinders Medical Centre after generator fails in blackout

Updated 30 Sep 2016, 11:01am

Embryos being prepared for transfer at a fertility clinic had to be destroyed due to a generator failure at Flinders Medical Centre during the South Australian blackout, the Health Minister says.

Jack Snelling told 891 ABC Adelaide 12 patients were affected by the tragedy on Wednesday, when wild storms knocked out power supplies to the entire state.

Back-up generators kicked in at Flinders Medical Centre after the blackout, but stopped after an hour, Mr Snelling said.



Sport Arts

PHOTO: Flinders Fertility says impacted patients have been offered counselling. (ABC News: Gregor Salmon)



"South Australia hasn't seen a storm like last week's in living memory,"

"It essentially ripped out the spine of our electricity system."

Premier Jay Weatherill









Federal Energy Minister Josh
Frydenberg said that while
last night's black out was not
linked with South Australia's
reliance on renewable
energy, there were questions
to be asked about the
wisdom the state's rapid
uptake of green power.









"that is a problem for SA and the government, Mr Weatherill has to answer for that."

"I regret to say that a number of the state Labor governments have over the years set priorities and renewable targets that are extremely aggressive, extremely unrealistic, and have paid little or no attention to energy security,"



PM Malcolm Turnbull







Federal Opposition Leader Bill Shorten said it was "poor form" for the Coalition to make political points about renewables while the crisis was ongoing in South Australia.









State Opposition
Leader Steven
Marshall insists that
storm damage in one
part of the state
shouldn't knock out
the entire system.









Energy industry experts have criticised comments linking the blackout in South Australia to the states reliance on renewable power



## **NEWS**



"If you've got a wind farm or a coalfired power station at the end of a transmission line and it is taken out by a storm IT DOESN'T MATTER WHAT THE ENERGY SOURCE IS"!

- Tony Wood, Grattan Institute



Long Reads Indigenous

Sexuality

The Playlist podcast

Comedy home Articles The Backburner Stuff We Found The Wizards of Aus Video

29 SEP 2016 - 12:46PM

#### What if Godzilla is to blame for the Adelaide power outage?



## Calls for enquiries and reviews

"Nevertheless, as a government there are always lessons that can be learned from an extreme weather event such as this. So it's important there's a thorough, independent review."

Jay Weatherill



## and the memes.....







#### LIVE

## SOUTH AUSTRALIA BLACKOUT These pictures just into our newsroom



IT'S OFFICIAL:

## WE DID IT!

Adelaide reaches zero emissions



## Meanwhile, back in the real world....











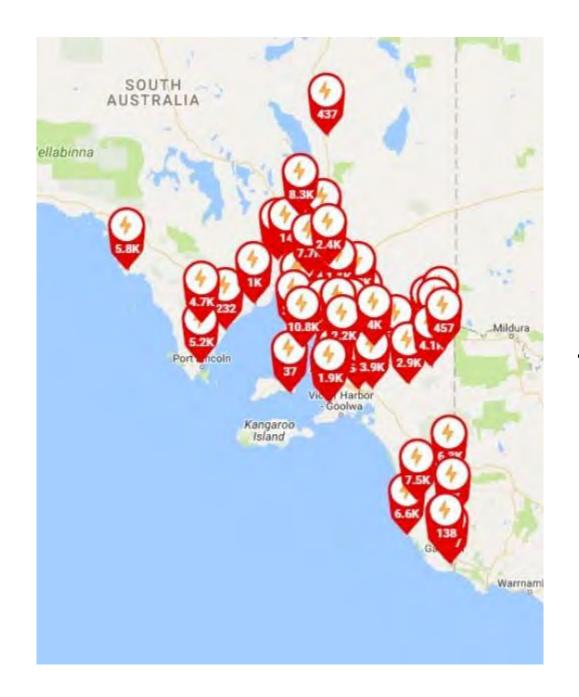










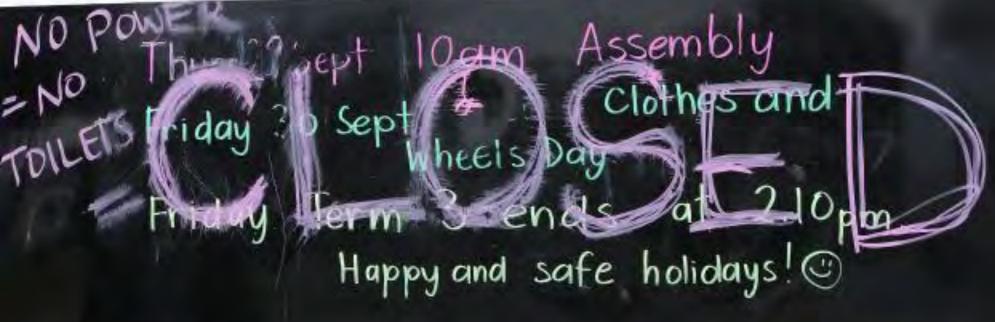


on the West Coast and Eyre Peninsula things were getting serious



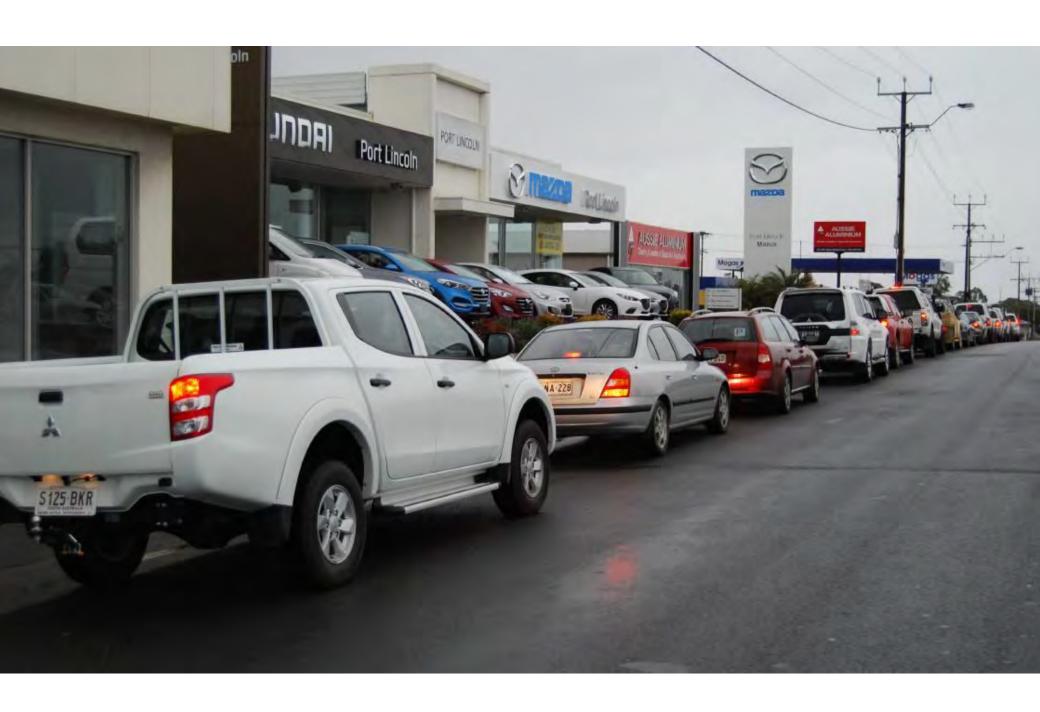


## Kirton Point Primary School





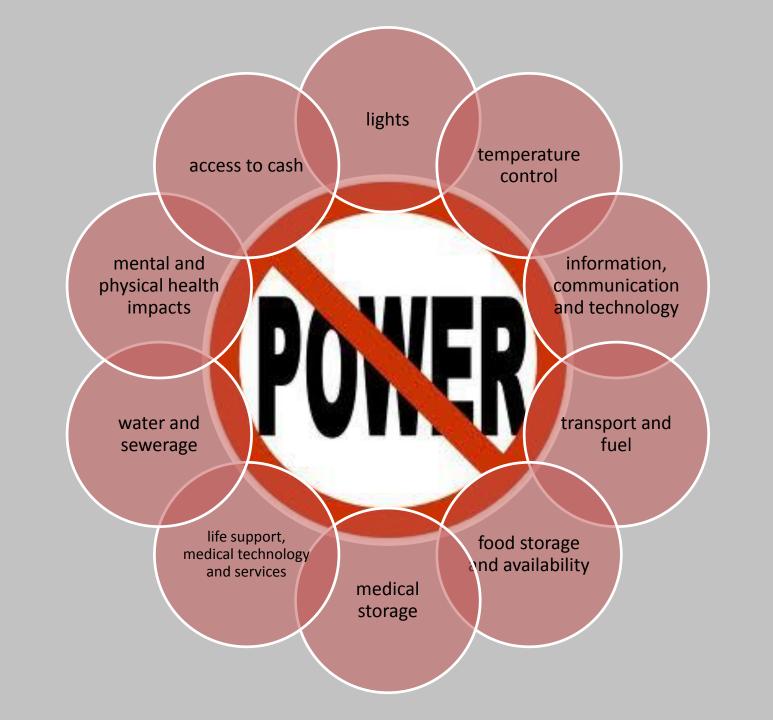














### Challenges

- scale of the flood
- impact on market gardens the state's food bowl
- damage to key infrastructure
- water management
- lack of regulation and resources around dams, levees, gauges
- capacity of emergency services
- lack of previous experience and established systems















### Don't be a #floodwit.... Stay out of floodwater.











### The 'Burns' review

- Review the emergency management response to impacts of the extreme weather event
- Review the response to and management of state-wide power outage
- Consider the adequacy of the State's prevention, preparedness, response and recovery arrangements

# OF THE EXTREME WEATHER EVENT SOUTH AUSTRALIA 28 SEPTEMBER – 5 OCTOBER 2016

Report presented to the Premier of South Australia

> Review Author Gary Burns Leanne Adams Guy Buckley







## Key themes from the review

#### Issues relating to:

- the black system event
- emergency and incident management in SA
- public information
- flood risk
- resilience
- coordination of emergency relief and recovery







### The black system event

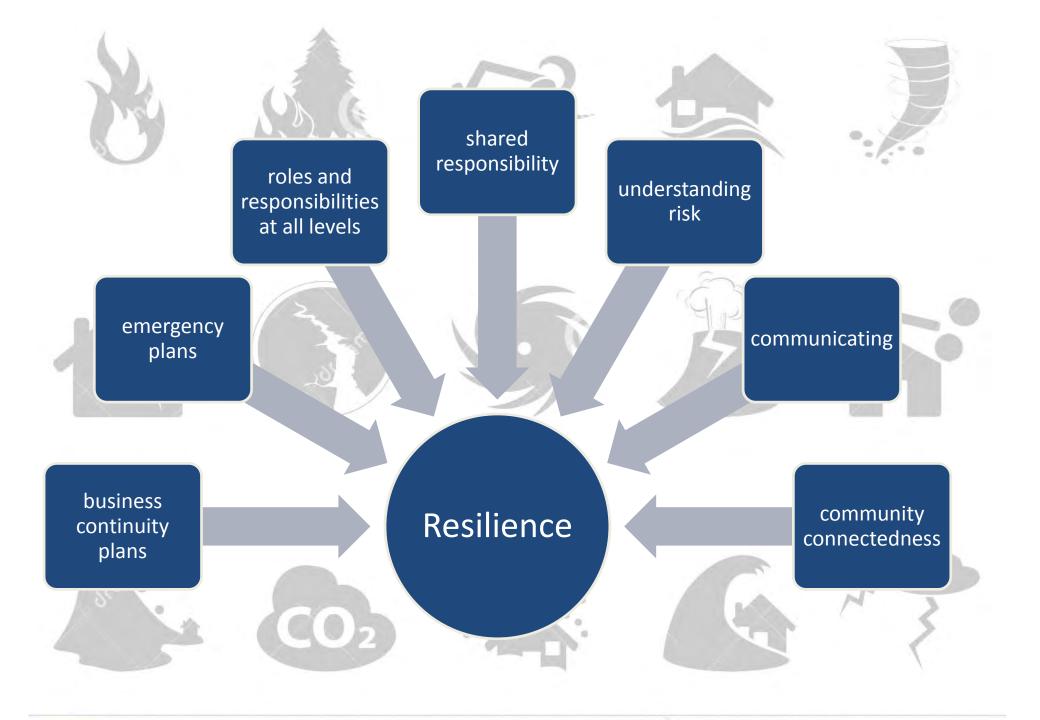
- public information about timing of outages
- communicating with communities without power
- business continuity for small business, big business and industry, emergency services, government and non-government agencies, health and aged care facilities
- no power = no refrigeration, heating and cooling, food preparation
- supplies food, fuel, water, medial
- essential services health, communications, ICT,
- transport fuel, traffic lights, closed roads













### Final thoughts

- ? foreseeable
- ? will these events continue to grow in magnitude
- ? role of businesses
- ? role of government and emergency services
- ? role of the individual
- ? increasing resilience



