SDCC Annual Activity Report

2019/2020 Financial Year

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Executive Summary

The 2019/2020 reporting year for the State Disaster Coordination Centre once again shows considerable growth in activity across the disaster management spectrum. Climatic influences drove a number of operation responses with some of the more protracted response periods recorded within the year. Significant support was provided to several extended operations some of which changed from the traditional wet weather driven incidents focus.

As the much drier outlook developed through the reporting year, the Bureau of Meteorology intelligence indicated a significant elevation of bushfire activity. A combination of low subsoil moisture, dry elevated fuels and no significant rainfall saw landscape fire impacting areas not traditionally affected by bushfire. The extreme fire conditions proved challenging to control with significant resources required including interstate human and physical resources. In the early stages Queensland deployed fire management and firefighting resources to northern NSW before returning north. Of note was the loss of traditional wet rainforest in the Gold Coast Hinterland to large scale fires. Substantial losses in buildings and infrastructure occurred across the southeast of the state as the season progressed. The 3,000 fires resulted in more than 7.7 million acres with the SDCC activated for 38 days in support of firefighting operations.

The increased dry environment resulted in a significant reduction in cyclone activity with Tropical Cyclone Esther the only system to cross the coast. Esther, a category 1 cyclone, formed from a tropical low in the southern Gulf of Carpentaria and was named on February 24. The system tracked across the Gulf eventually reaching just short of the northwest Western Australia coast before tracking back towards Tennant Creek. Minor damage was recorded in Queensland with no structural damage reported.

Heavy rainfall and severe weather in late January and early February affected catchments in the central and western river systems, extending east to the Logan River catchment. SDCC involvement saw 11 Watch and Act Emergency Alerts issued for areas affected by flooding. Intelligence, Logistic and Reporting activity within the SDCC for this event saw over 68,000 emails and over 13,000 SMS messages processed through the Event Management System.

The Event Management System continues to be used as the data warehouse and reporting tool, critical to SDCC operations. Agencies are now able to input their daily reporting whilst logged in externally reducing the amount of time agency staff are required in the centre. This external access capability proved significant in reducing risks with COVID-19 SDCC operations support to the health response. Transmission risks were reduced through multiple risk mitigation strategies including staff working from home, Watch Desk physical isolation and increased security. From an initial activation in February the system handled more than 597,000 emails and nearly 5,200 individual tasks related to COVID-19 operations. System support was increased to ensure 24-hour coverage was available to address problems with no major failures reported.

As the COVID-19 pandemic continues, SDCC staff provide significant logistic support to the State Health Emergency Coordination Centre, operating remotely to mitigate transmission risks. The centre is also providing a multilayer reporting capability across Logistics and Finance, Intelligence and Event reporting functions as they continue to operate at a high tempo to meet the requirements of State, Federal and Local Governments. This level of activity is expected to continued well into 2021.

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- Iain McCulloch, QFES, Emergency Management Training and Exercising Unit (EMTEU)
- State Duty Supervisor Peter Heath, QFES, SDCC Watch Desk

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The Centre

Introduction

This Annual Activity Report will provide an overview of activities conducted within the State Disaster Coordination Centre (SDCC) within the 2019/20 financial year. The report will include information on the SDCC's core business units, planning and exercising capability, lessons implemented from previous years, systems development and achievements. Additionally, this report will include emergency management operations where the SDCC activated to provided support to local and district disaster management groups and agencies. Statistical comparison of daily and operational business is included to provide insight into the workings and trends of the SDCC.

Background

The SDCC is located within the Emergency Services Complex at Kedron Park, Brisbane. The centre provides a physical venue to facilitate state-level, whole-of-government (WoG) approach to emergency management while supporting disaster management groups at the local and district levels. The centre is home to two assemblies that are integral pillars within the Queensland Disaster Management Arrangements (QDMA); the State Disaster Coordination Group (SDCG) and the Queensland Disaster Management Committee (QDMC).

The SDCC work units are staffed by Queensland Fire and Emergency Services (QFES), Queensland Police Service (QPS), Public Safety Business Agency (PSBA) and the Bureau of Meteorology (BOM). These units operate as "Business as Usual" (BAU) during non-activation periods then merge into the capabilities within the centre, as required, during activations. QFES staff administer the facility during BAU. Improvements to the facility and processes are a collaboration between QFES and QPS.

Figure 1 QPS Officers within the Operations Cell

During operations staffing of the centre can increase to more than 100 per shift, dependant on the expected needs for the operation. Most capability staff are called upon from QFES, QPS & PSBA. Additional staff with a specific skillset, can be called on from both state and commonwealth agencies. Liaison officers from state, Commonwealth & non-government agencies (NGAs) attend the centre as required.

The centre uses the Australasian Interagency Incident Management System (AIIMS) framework to define the roles and functions of staff. The SDCC implements the following capabilities:

Command
• Provide overall oversight of the actions of the SDCC during a disaster event- maintaining state-wide situational awareness of the SDCC's operations to support decision making

Operations	Logistics	Planning	Intelligence	Aviation	Public Information
• Report on current response and emerging issues to enable control and coordination of the SDCC Capabilities; as well as reviewing and gathering information from relevant sources to maintain the common operating picture and report on key activities and events.	• Coordinate the acquisition and provision of human and physical resources, services, and materials to support incident objectives	• Provides situational awareness to the SDCC and completes planning related tasks	• Responsible for the collection, collation, and analysis of information and intelligence to assist with disaster response	• Provides a state-wide coordination of event related air assets and supporting resources leading to the safe, efficient, and effective use of air assets during high demand periods	• Responsible for the provision and delivery of Whole of Government (WoG) messaging during emergency and disaster events

Figure 2 SDCC Australian Interagency Incident Management System

2019/20 Activations

During 2019/20, the SDCC activated five times to support emergency management operations. The centre was activated for a total of 198 days for the financial year, an increase of 371% on 2018/19. This is a new record for days the centre was activated in a financial year.

Activated: 5 – 24 September
Significant bushfires: Sarabah Complex, Stanthorpe, Peregian Springs, Mount Maria, Stradbroke Island, Ballendean, Linville, Mt Larcom

Bushfires

Activated: 12 – 20 February
Flooding: Logan City, Warwick, Dalby, Chinchilla Tewantin, Surat St George, Dirranbandi, Bollon, Charleville & Gympie.

Severe Weather

Activated: 2 February to EOFY
Whole of state support to combat impacts of COVID-19 for Queensland

COVID-19

July 2019 — November 2019 — February 2020 — June 2020

September 2019 — February 2020 — February 2020

Bushfires

Activated: 8 – 25 November
Major bushfires: Peachy, Ravensbourne, Moreton Island, Cobraball, Main Range, Kilkivan, Jimna, Kingaroy, Canungra, Redbank Creek, Millmerran, Gregory River

Tropical Cyclone Esther

Activated: 24 February
Landfall: Gulf of Carpentaria Qld/NT Border

Figure 3 2019/20 SDCC Activations

SDCC Activation Levels

The SDCC is always operating and is ready to activate to support sudden emergency operations. Preparedness tasks are carried out daily to ensure the centre can activate at short notice to support preparedness for QDMA stakeholders.
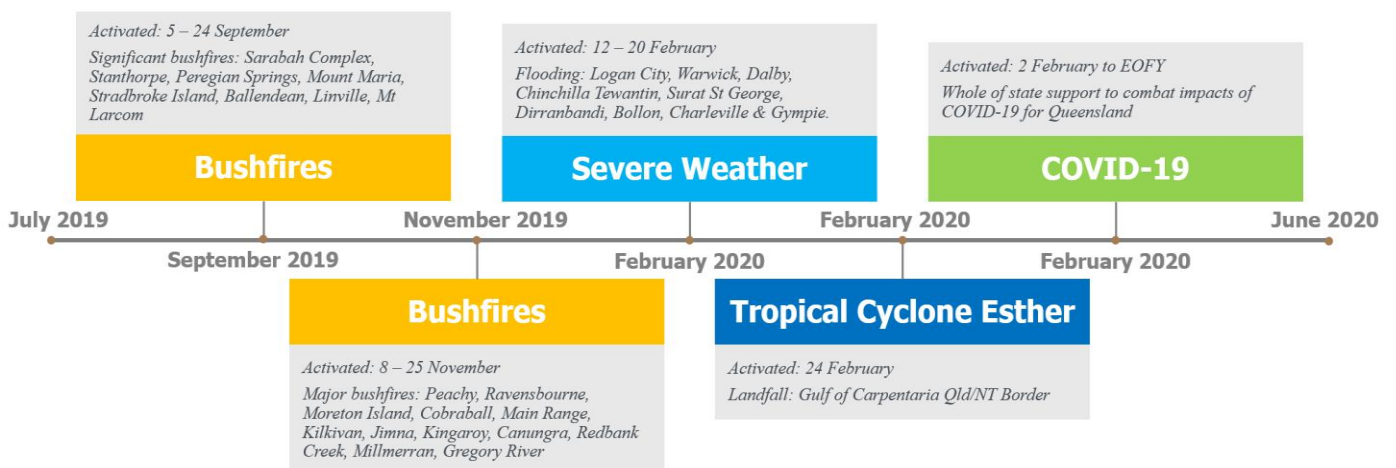
The SDCC operates activation levels stated within the QDMA. These levels change based on the needs of relevant Local Disaster Management Groups (LDMGs), District Disaster Management Groups (DDMGs), and state-level resources. Where possible, changes to the SDCC activation levels are made in advance of a disaster to ensure appropriate planning and support is available. QFES and QPS management collaborate on the activation level movements of the SDCC. Rostering for the centre is conducted prior to activation level changes or as a result to short-notice activation.

Business as usual (BAU): During this time, the Watch Desk monitor for potential emergency situations. Once an event is identified, the Watch Desk liaise with disaster management stakeholders gaining greater situational awareness and brief QPS and QFES management. These briefings can lead to the decision to activate the SDCC.

Alert: When at Alert, QPS are present in the SDCC liaising with LDMGs and DDMGs. The SDCC Commander is briefed on the situation. The Planning Unit develops further plans for Disaster Management Groups (DMG) as well as inclusion into briefings within the centre. Initial staffing of the Intelligence capability may also occur. Further rostering and logistics tasks can be carried out to ensure resources in the centre and on the ground is sufficient. The relevant situation continues to be monitored by the Watch Desk as well as any other threats.

Lean Forward: A greater presence in the centre from QFES and QPS is expected at this level. SDCG members and proxies begin to attend the centre. All capabilities will now have some level of staffing present within the SDCC. Requests for Assistance (RFAs) from DMGs may be received and actioned at this stage. The Public Information capability may disseminate initial key messaging for the event.

Stand Up: The SDCC runs at required capacity in all capabilities at this level and may occur as the first movement after BAU for an incident that has little or no lead time. The SDCC Commander ensures the SDCC is operating effectively to support the needs of local operations. Event specific reporting commences ensuring stakeholders maintain broad situational awareness. This is the highest level of SDCC activation.

Stand Down: As support to the DMGs decreases, activation movement of the SDCC back to Stand Down occurs. When at this level, the SDCC is replenished for future activations. Debriefs, reports and queries on the operation can occur. The Watch Desk continues to monitor the event and supports any RFA's including resupply that may requested by the DMGs. The SDCC returns to BAU status.

SDCC Watch Desk

The Watch Desk is a permanent, 24/7 presence within the SDCC staffed by a rotating team of three; one State Duty Supervisor and two State Duty Officers. The Watch Desk actively monitors for a wide range of emergency management incidents, notifies and provides reports to emergency management stakeholders. The Watch Desk operates as the "eyes and ears" for Queensland in disaster management. Watch Desk staff are the link to the Commonwealth Government, Local Government, and departments from other Australian states when the SDCC is not activated.

The Watch Desk source and analyse information used to conduct threat assessments, manage forward planning and brief key decision makers. The Watch Desk supports the Queensland Disaster Management Arrangements (QDMA) by ensuring:

- Through the provision of timely and accurate warnings and reports which are disseminated to relevant local, district, regional, state and interstate stakeholders
- State Emergency Service (SES) tasking across the state is effectively coordinated
- The SDCC is maintained in a state of operational readiness.

The SDCC Watch Desk works closely with the QPS Disaster Management Unit (DMU) and the BoM monitoring disaster related intelligence and information sources.

The Watch Desk works together with the BoM and continuously monitors current weather patterns and developments, making threat assessments and disseminating weather related information to stakeholders when required for warning and intelligence purposes.
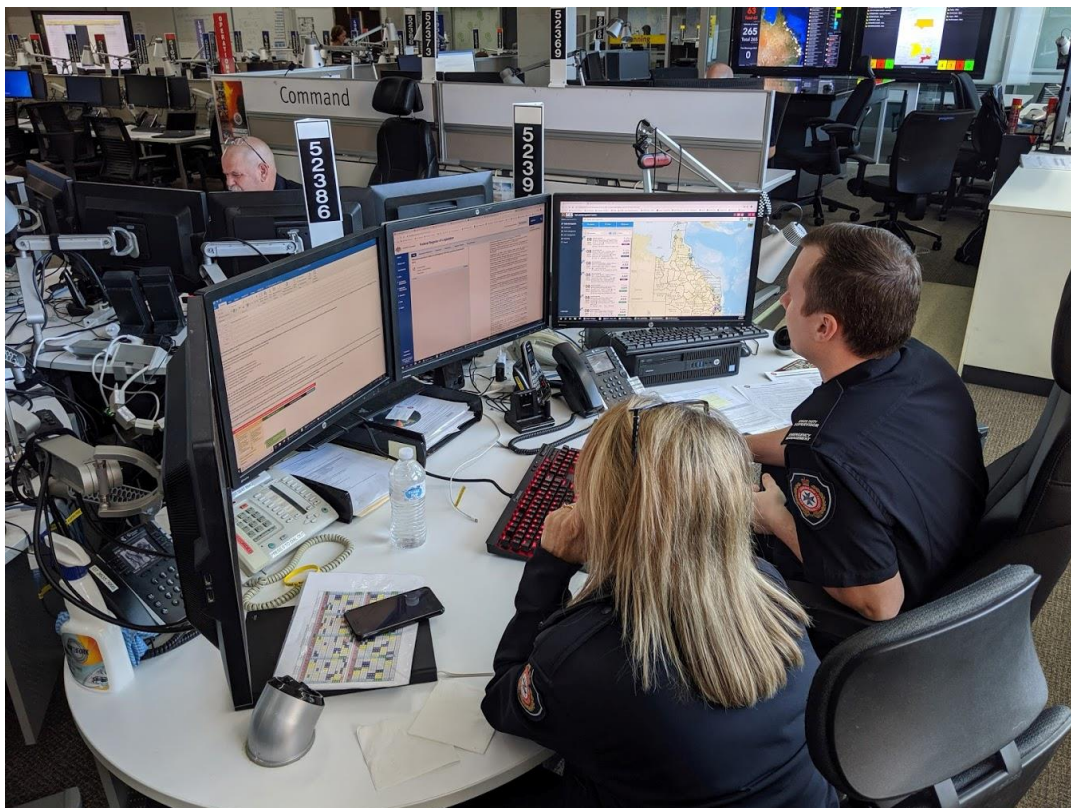

Figure 4 SDCC Watch Desk staff operating across multiple platforms

In 2019/20, 2,665 weather warnings were processed by the Watch Desk. This is a decrease of 26% when compared to 2018/19. This is also a 15% decrease on the three-year average of 3131 warnings. The highest number of weather warnings processed by the Watch Desk in 2019/20 related to:

- Marine Wind Warnings - 861 (32% of all warnings processed)
- Severe Thunderstorm Warnings - 836 (31% of all warnings processed)
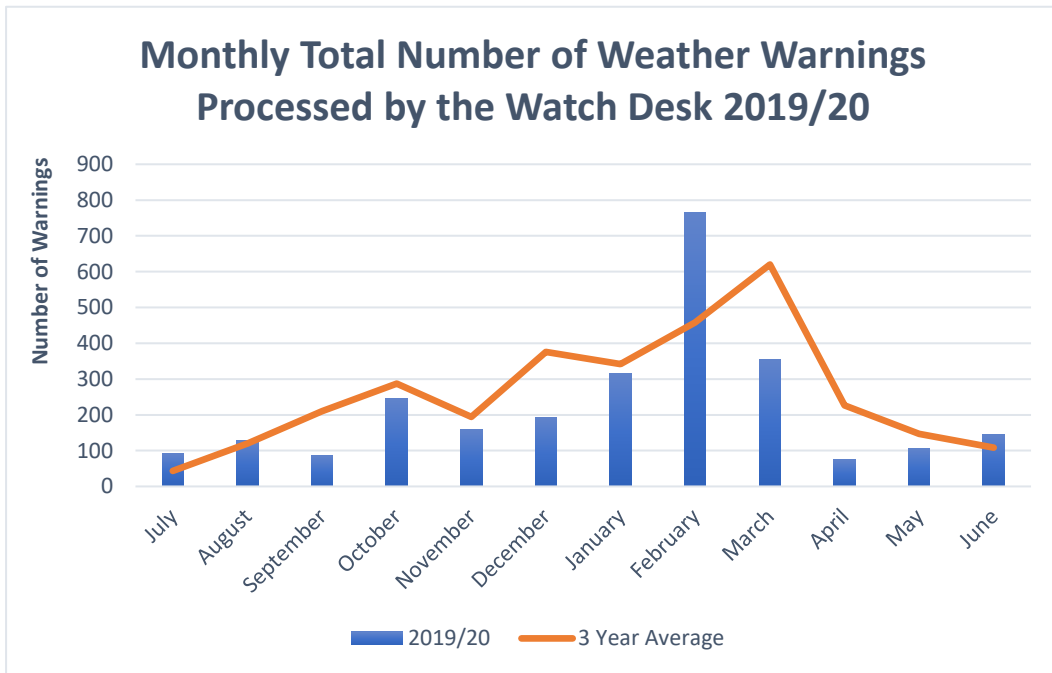- Flood Related Warnings – 607 (23% of all warnings processed).

Figure 5 Month Warnings actioned by the Watch Desk for 2019/20 with the previous 3-year average
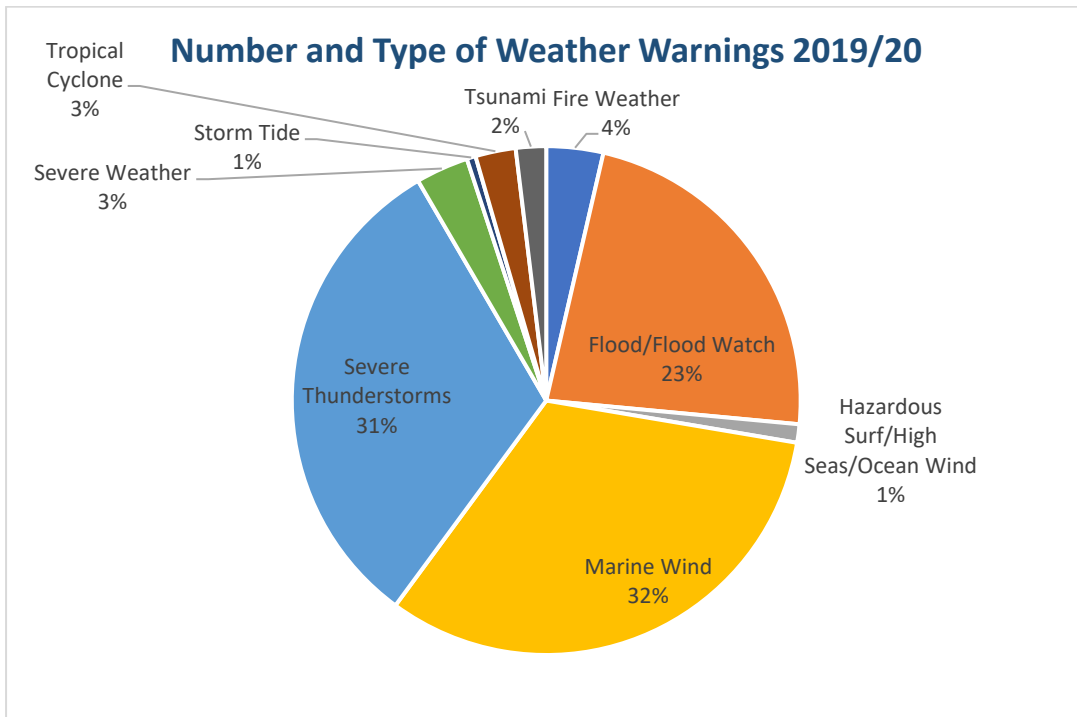

Figure 6 Number and Type of Weather Warnings received by the SDCC for 2019/20

Watch Desk staff also develop and disseminate the following reports:

- **5am Queensland Emergency Management Report (QEMR):**
  A daily report issued to key ministerial and departmental stakeholders on significant emergency management activities of the previous 24 hrs across Queensland, Australia and internationally. Included is also weather updates, related open-source media and other emergency management risks to the state government and its resources.

- **7am Ministerial Text:**
  A text message sent to the QFES minister and selected recipients which provides a summary of QFES activities over the previous 24hrs and expected operational impacts. The message also includes weather and significant media coverage of QFES.

- **10am QEMR**
  This report is disseminated to a wide range of disaster management stakeholders at a local, state and national level. The report contains general information on significant emergency management operations within Australia and internationally. Weather information and forecasts, state disaster management group activations and open-source media articles.

- **Weather Outlooks**
  These Outlooks are compiled by the SDCC's meteorologist and disseminated with the 10am QEMR on Tuesdays and Fridays during the bushfire and severe weather seasons (August to April, inclusive). Out of this time, additional reports are issued when severe weather conditions are expected. The Outlooks include expected weather conditions and their associated risk to the community.

- **Incident Briefs**
  Upon notification of a wide range of emergency management incident, the Watch Desk will publish incident briefs. The brief will include information on the incident such as the type of incident, location or impact area, damage or injuries reported and response agencies activities. Updates are issued as required with the recipients targeted based on the type and expected impact of the incident.

- **QFES Commissioner Snapshot**
  The Watch Desk shares the collation and dissemination of this report with the QFES State Operations Centre (SOC). This report contains detailed activities of QFES, weather forecasts, forecasted operations and contentious issues with operations. The report is sent to senior QFES management.

SDCC Watch Desk staff are the only personnel trained and authorised to create and disseminate Emergency Alert (EA) campaigns within Queensland. Staff conduct multiple training tasks throughout the year to maintain EA skills and test system performance. During the 2019/20 season the Watch Desk disseminated 99 EA campaigns which resulted in over 115,000 calls being made and over 1,100,000 SMS being sent to people of Queensland. In comparing to 2018/19, the number of EA Campaigns created fell by 36%.

Number of EA Campaigns by Month 2019/20
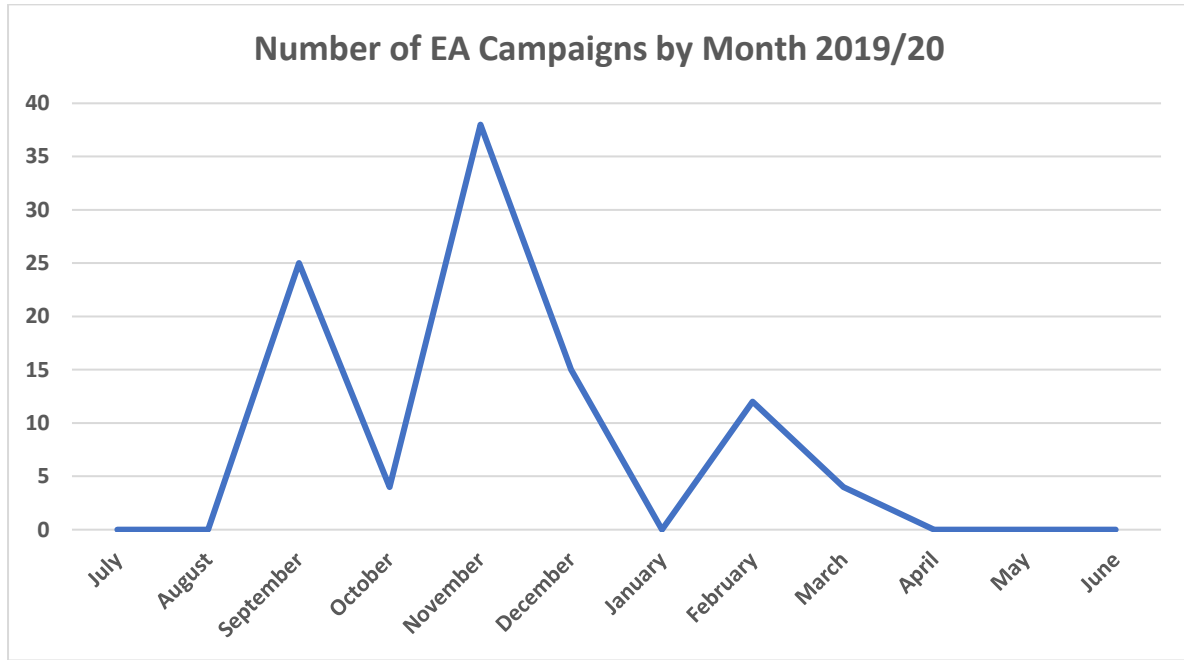
Figure 7 Emergency Alerts actioned by the Watch Desk by month for 2019/20

Queensland Emergency Alert Campaigns 2019/20 by Threat Type

1%
4%
10%
84

- Flood
- Bushfire
- Covid-19
- Dam Failure

Figure 8 Emergency Alerts disseminated by type for 2019/20

During SDCC activations, the Watch Desk becomes part of the Operations capability and assists the disaster response by continuing to compile and disseminate reports to relevant stakeholders, identify significant issues, accurately record events within electronic logs and provide continued EA campaign support.

SES Tasking

The Watch Desk is the centre point for state-wide coordination of SES tasking in the SES Tasking and Management System (TAMS). The SDCC Watch Desk provides coordination of SES activations, providing additional resource sourcing when requested.

Between 1 July 2019 and 30 June 2020, 6,805 requests were entered into TAMS. This is a 36% decrease from the previous financial year. *Figure 9* below is a map for SES jobs entered into TAMS for the 2019/20 year.

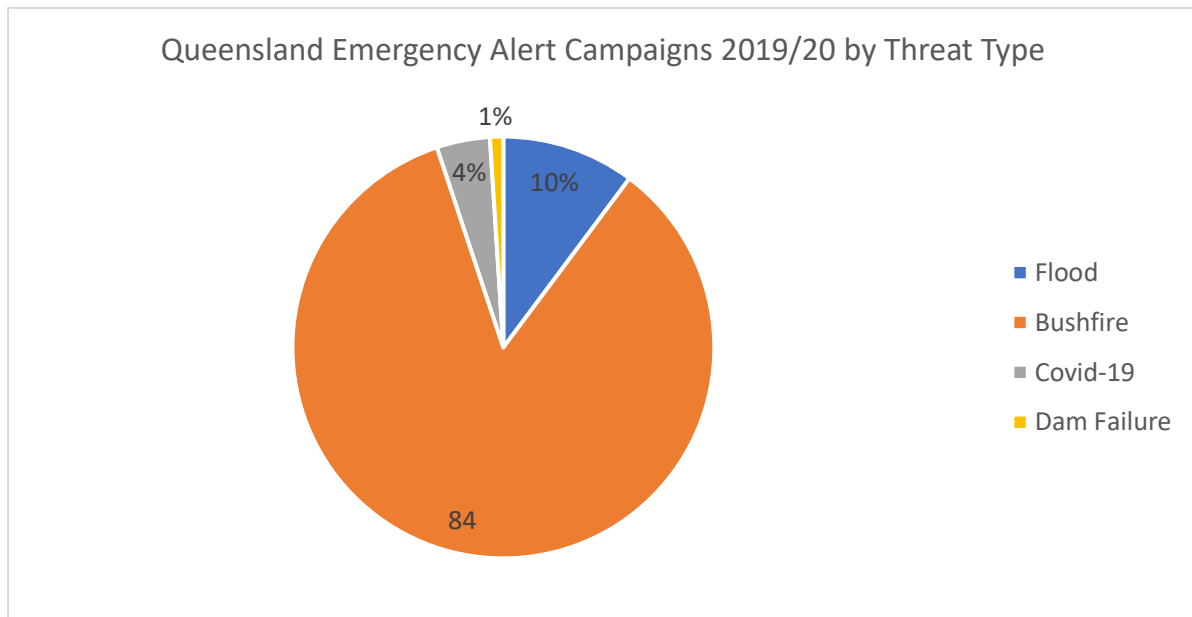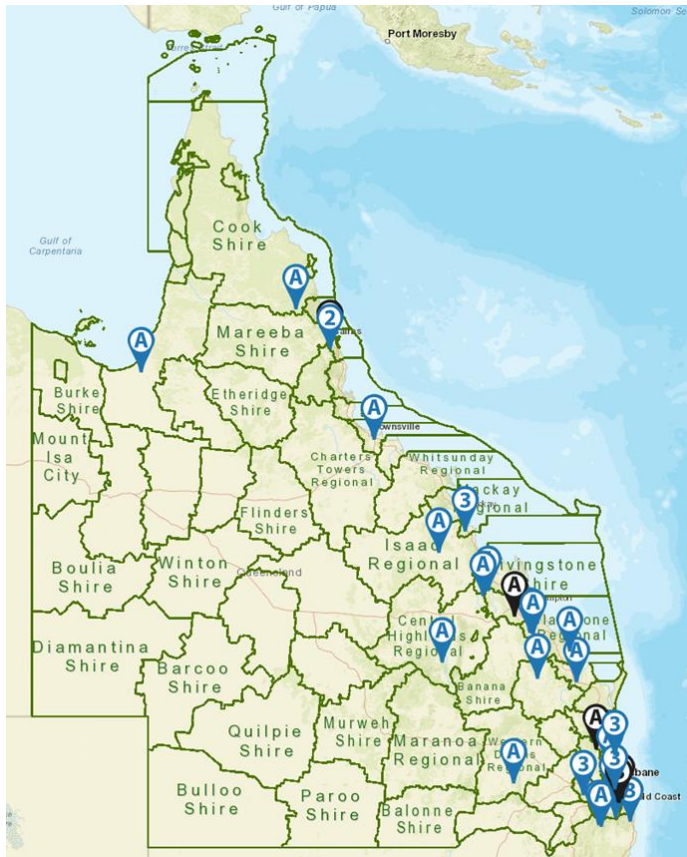*Figure 9 Geolocations for SES tasks and agency support requests from TAMS for 2019/20*

SES regularly receive support requests from other emergency services and government agencies. These requests are generally received by the Watch Desk where they are recorded in TAMS. In 2019/20, requests for SES support included; assistance with rescue from heights and depth, removal of injured persons involved in a road traffic collision, traffic control, search and rescue of missing persons, flood boat rescue, re-supply of isolated communities and general assistance.

During the bushfires SES supported operations with air base operations, incident management and logistical support, traffic control, chain sawing, community education, Remotely Piloted Aerial Systems (RPAS) operations and other activities.

Requests for SES support during COVID-19 initially came through the Watch Desk. Queensland Health and QPS requested SES to support at testing clinics, conduct welfare checks & border check points. Operations continue into 2020/21, with the Watch Desk continuing to have active oversight and take requests from agencies for SES assistance.

Table 1 below shows SES jobs received in TAMS during 2019/20 with Watch Desk providing active oversight.

		Tasks	ASR	Total
2019	**July**	26	66	92
	August	18	72	90
	September	64	181	245
	October	193	91	284
	November	361	231	592
	December	589	173	762
2020	**January**	1,150	61	1,211
	February	2,304	79	2,383
	March	275	196	471
	April	138	137	275
	May	163	101	264
	June	47	89	136
	Total	5,328	1,477	6,805

Table 1 SES jobs by type, month and total for 2019/20

Event Management System

A web-based software called "Event Management System" (EMS) is used by the SDCC to assist with record keeping and manage communications. EMS is the sole point of truth for document storage, inbound and outbound correspondence, reporting, taskings, contact management, teleconferencing and operations logs. QFES and PSBA staff are trained to develop, configure and locally manage the system to support the needs of operations.

In 2019/20, there were 10,238 reports created in EMS related to disaster management and other SDCC relevant issues. This is an increase of 24% when compared to 2018/19. This is also a 39% increase on the three-year average of 7,351 reports.

Number of SDCC Reports Disseminated to Stakeholders
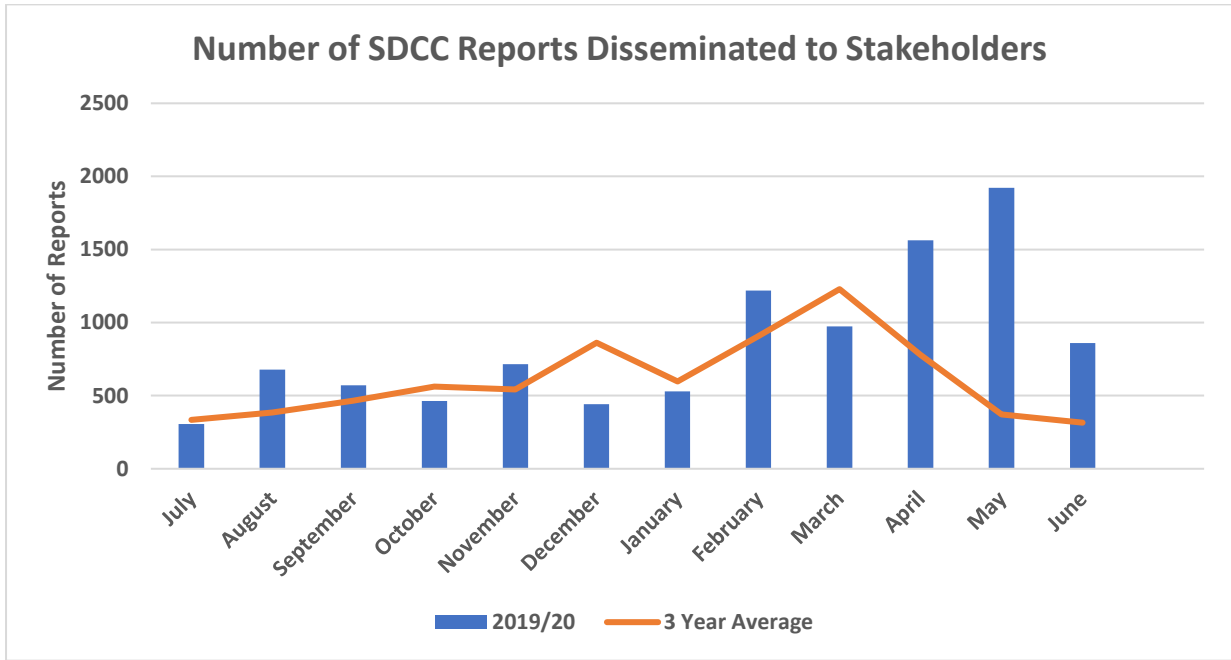
Figure 10 Reports disseminated by the Event Management System to stakeholders for 2019/20

In 2019/20, the SDCC received a total of 52,952 emails requiring triaging and actioning in the EMS system. This is an increase of 31% when compared to 2018/19. During this same period, the SDCC sent 1,158,772 emails in EMS. This is an increase of 29% when compared to 2018/19. This is also a 69% increase on the three-year average of 686,809. A total of 173,168 SMS were sent to SDCC stakeholders using EMS. This is a decrease of 18% when compared to 2018/19. This, however, represents a 12% increase on the three-year average of 154,889.

In 2019/20, the SDCC actioned 10,669 tasks in EMS related to disaster management and other SDCC relevant issues. This is a decrease of 16% when compared to 2018/19. This is also a decrease of 12% on the three-year average of 12,089 tasks.
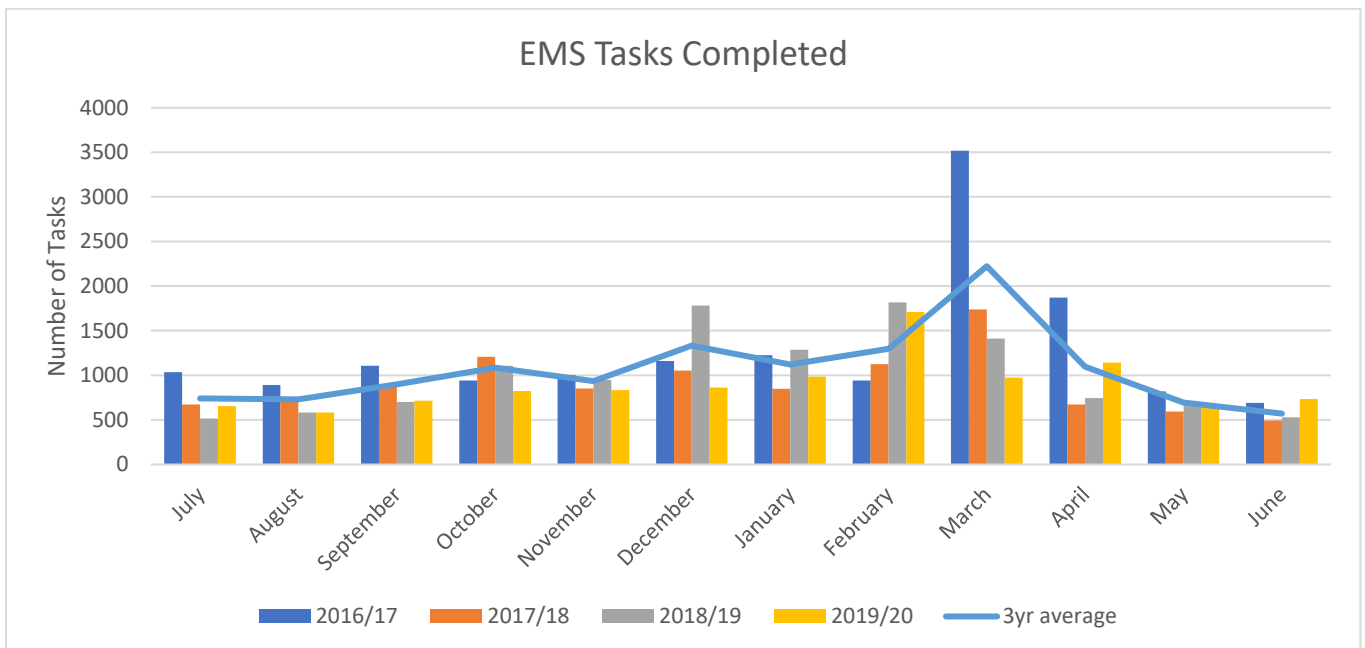
EMS Tasks Completed

Figure 11 Tasks actioned by SDCC staff within the EMS system for 2019/20

SDCC Work Units:

QPS Disaster Management Unit

The Disaster Management Unit is located within the SDCC and is staffed by QPS sworn officers. The role of the DMU during BAU is to co-ordinate through District Disaster Co-ordinators and Disaster Management Support Officers the compliance of legislated mechanisms including planning for disasters and assessment of disaster response plans.

QPS Officers undertake the role of Secretariat positions with both the State Disaster Co-ordination Group and Queensland Disaster Management Committee. These roles require the co-ordination of both groups in response to disaster events including the minutes and follow up of action items that lend to whole of government response and community recovery post event.

QPS take command of the SDCC during activations and assume the lead for the Operations and Aviation capabilities.

Emergency Management Planning Unit

The Emergency Management Planning Unit (EMPU) provides high level planning support to QFES and all levels within the QDMA. This is achieved through the development, implementation and maintenance of state level plans, situational awareness products, tools and projects. Within the past 12 months the EMPU were responsible for the development of the QFES Common Operating Picture (COP) which has been rolled out to all seven QFES Regions. When the SDCC is activated, staff from the EMPU lead the SDCC Planning capability. The role of the SDCC Planning capability is to conduct directed and proactive planning in addition to enhancing situational awareness. This is achieved through the timely provision of hard copy and digital graphical information not only to the SDCC and SOC, but also to the SDCG and QDMC. During the COVID-19 response, the SDCC Planning capability was responsible for the development of the Whole of Government Pandemic Plan. It also was involved in the development of a range of supporting plans, including Rapid Response Plans.

Emergency Management Training and Exercising Unit

The Emergency Management Exercise Coordination Unit coordinates training activities for the QFES SOC and the SDCC, as well as assisting SOCB staff in attending professional development opportunities.

During the period 1 July 2019 to 30 June 2020, training activities were severely impacted by the prolonged activation of the SDCC responding to the unprecedented number and nature of bushfires across Queensland, several severe weather events and then COVID-19 from February 2020. This resulted in 27 SDCC capability training courses being cancelled. However, despite the disruptions 19 face to face SDCC courses were delivered to 163 staff from QFES, QPS and other state agencies. No training was delivered in the QFES SOC.

Online training modules are being delivered for the SDCC Aviation and Logistics capabilities. The inaugural course will be conducted in August 2020 and will be delivered through Microsoft Teams.

A major bushfire exercise that involved all three levels of the QDMA was postponed due to the ongoing operational responses. Whilst this was primarily a discussion exercise, it did include a deployment of a drone team in a rural setting. Two tsunami exercises were also postponed.

SDCC Agency Liaisons

The SDCC has two staff, one each from QPS and QFES, who provide a link between the SDCC and the agencies throughout the year. All government and non-government agencies have worked continuously since last August by providing support to the SDCC throughout various activations. The detailed specialist advice reported in the Agency Updates are frequently relied on to inform the activities and planning being undertaken by each agency. This contribution and willingness to assist has resulted in an excellent effort collectively across government and having a positive impact on communities. While response to COVID-19 continues, many agencies are continuing to be a part of working groups and are preparing to respond to small outbreaks in any part of the community, as required. Over 450 staff were trained as agency representatives across more than 45 agencies for the 2019/20 year.

Tours

The importance of the work conducted by the SDCC is identified by fellow emergency management stakeholders. SDCC staff present the functionality, processes, lessons management and design of the centre to local, state, national and international agencies. The unique structure of the QDMA, compared to other Australian states, is frequently discussed with challenges and benefits discussed.

While the SDCC had restricted access for most of 2020, visits from the Australian Defence Force, Local Government staff, New South Wales Rural Fire Service, Australian Volunteer Coast Guard, Queensland Ambulance Service, Surf Life Saving Queensland, Mongolia's Emergency Management Agency, Queensland University of Technology and various work units from inside QFES were conducted. More than 350 people visited the centre through the year. This does not include informal tours while interstate and international agencies deployed into Queensland to support fire operations in 2019.

Leading into 2019/2020

Predictions provided by the BoM and the Australian Fire Authority and Emergency Services Council for 2019/20 for Queensland was for above average bushfire conditions, an average number of cyclones, little rainfall with no prediction of a global pandemic. At the end of the financial year, the state had endured multiple bushfire emergencies, significant flooding to western Queensland, a cyclone crossing in an isolated part of the state and major disruption to the world by COVID-19.
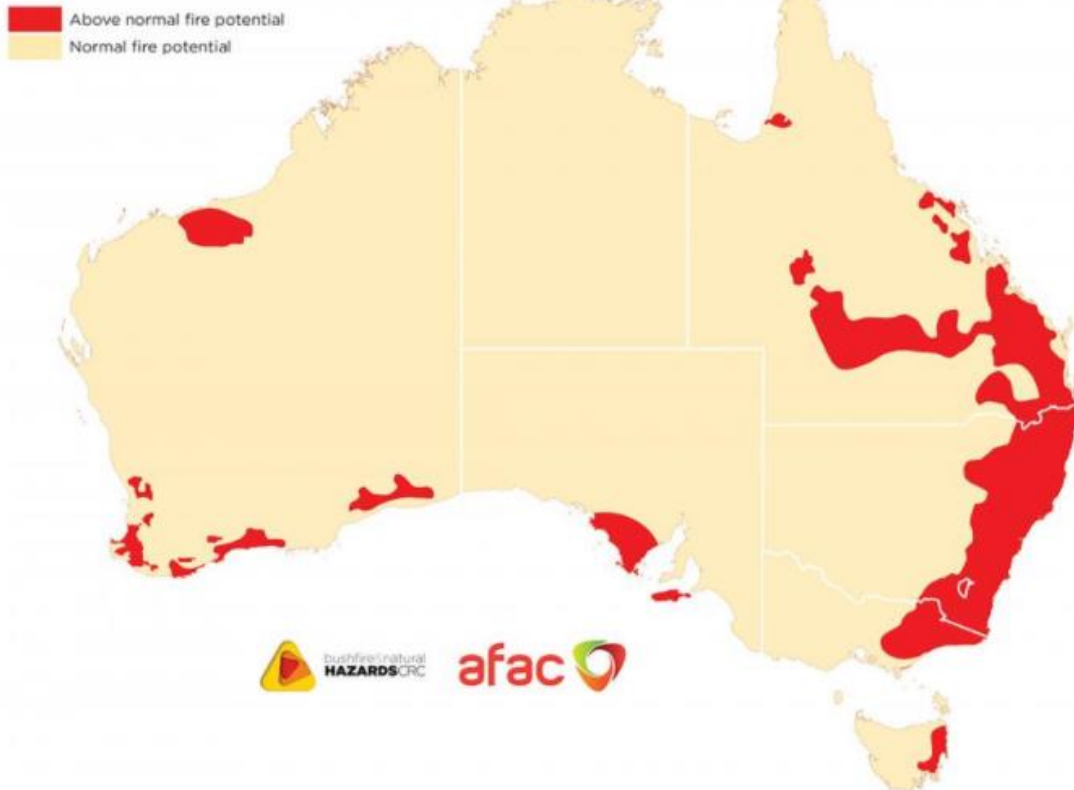
Figure 12 Australia Bushfire Outlook - August 2019 (Source AFAC)

To ensure the SDCC was ready to support communities for the impending bushfire season, the lessons identified in the 2018/19 season were reviewed. Amendments to processes, changes to communications channels and a better focus on keeping the community informed were made.

Some of these improvements were:

- Imbedding a QFES Liaison into the SDCC to become a conduit between the QFES SOC and the SDCC.
- The adoption of dissemination EA messages for *Leave Now* and higher community bushfire warnings was carried across from the 2018/19 bushfire season.

A fire ravaged state

The fire season for 2019 began earlier than usual in Queensland, though this wasn't unexpected. QFES, Queensland Parks and Wildlife Service (QPWS), HQ Plantations, local governments and landholders were aware of the catastrophic potential the 2019 bushfire had on Queensland. QFES' Operation Cool Burn was conducted to reduce the bushfire risk to communities through hazard reduction burns, community engagement with land users and resilience.

While preparedness activities helped to reduce the risk to some communities, 2019 broke the record as the driest year in Australian history. This coupled with the hottest year on record led emergency management stakeholders to monitor fire danger conditions closely. Bushfire numbers increased from August.

On 2 September, a vegetation started in Sarabah (Scenic Rim Regional Council). The fire heavily impacted on the Lamington National Park. On the 6 September an Emergency Warning was issued for the fire as it approached properties. EAs were issued to advise the public to take appropriate action. Warning levels increased then decreased over multiple days with the fire continued by 14 September. The fire destroyed 11 houses and 5 commercial properties and burnt more than 5,000ha of land.

A fire burning at Stanthorpe starting at the beginning of September and burnt for multiple days. The area was already impacted by drought with severe water restrictions in place. On 6 September, with fire danger ratings at Catastrophic, an Emergency Warning was issued to advise residents to 'leave now or seek shelter immediately. EAs were issued by the Watch Desk to ensure the community was informed as best as possible to the actions they needed to take. Reports indicate that four dwellings were destroyed by the fire. Fire continued to burn for several days. Fires also impacted areas around Ballendean and Applethorpe, near Stanthorpe.

The area of Peregian Springs was impacted by devastating fire conditions in the 2018 fire season and would be impacted again in 2019. On 9 September a bushfire broke out in the afternoon. Residents were advised to evacuate from the area as the fire raced towards Peregian Beach. EAs were sent out by the Watch Desk. Damage assessments undertaken after the fire reported severe properties damaged, one destroyed and about 1,000ha burnt.

Other fires of significance during September:

- Lakes Creek (Rockhampton LGA): over 1,300ha burnt
- Warkon (Maranoa LGA): five dwellings, three sheds and stables were lost
- Stradbroke Island (Redland LGA)
- Biboohra (Mareeba LGA): one dwelling was lost

The SDCC activated to support DDMGs, LDMGs and disaster management agencies from 5 – 24 September. Disaster Recovery Funding Arrangements were activated for Scenic Rim, Southern Downs, Noosa, Sunshine Coast and Gold Coast LGAs. 25 Emergency Alerts were issued for the bushfires in September and close to 500 reports disseminated out to stakeholders by the SDCC.

By the end of September more than 60,000ha had burnt across the state with fires continuing to burn through October.

Activation Statistics: Extreme Fire Conditions 5-24 September	
SDCC total days at increased activation levels (5-24 Sept)	20
Number of Emails Received	4,260
Number of Emails Sent	75,485
Number of SMS Sent	12,857
Number of Tasks Completed	527
Number of Reports Disseminated	492
Number of Emergency Alerts Issued	25
Number of Weather Warnings Issued	73
Number of SES tasks monitored during activation period	38

Table 2 SDCC Activation Statistics for September 2019 Bushfire Activity

In October 2019:

- QFES deployed firefighters into New South Wales to assist with fires burning near Glen Innes
- Mount Sylvia (Lockyer Valley LGA): Over 15,900ha burnt
- Peregian Beach (Noosa LGA): Fire near the high school. 1 Emergency Alert was issued
- Carney Creek (Scenic Rim LGA): Over 16,000ha burnt
- Maroon (Scenic Rim LGA): multi-day bushfire including QPWS

Little to no rain in the Spring led to further significant fires in November. The SDCC activated again for 18 days to continue support of the response and recovery efforts underway. On 9 November, a State of Fire Emergency was declared across 42 local government areas, predominately in the east of the state.

Significant fires in November:

- Ravensbourne & Peachy (Toowoomba LGA)
- Teewah (Noosa LGA)
- Jimna (Somerset LGA)
- Thorton (Lockyer Valley)
- Cooktown (Cook LGA)
- Lower Beechmont (Gold Coast LGA)
- Cooroibah (Noosa LGA)
- Moogerah (Scenic Rim LGA)
- Cobraball (Livingstone LGA)
- Moreton Island (Brisbane LGA)
- Border Ranges Complex Fire (Scenic Rim LGA):
- Lake Mitchell (Mareeba LGA)
- Biboohra (Mareeba LGA)

Activation Statistics: Op Redux 8-25 November	
SDCC total days at increased activation levels (8-25 Nov)	18
Number of Emails Received	4,558
Number of Emails Sent	106,516
Number of SMS Sent	21,055
Number of Tasks Completed	563
Number of Reports Disseminated	568
Number of Emergency Alerts Issued	38
Number of Weather Warnings Issued	104
Number of SES tasks monitored during activation period	336

Table 3 SDCC Statistics for November 2019 bushfire activity

The 2019 fire season in Queensland did not end with a flood or heavy rains, but merely tapered off. Fires continued to burn, and new ones started into the new year. Recovery work continues to support communities impacted by the fires.

In total for the 2019 Bushfire Season in Queensland:

- Over 3000 fires were reported

- More than 7.7 million hectares burnt

- 49 dwellings and 101 other buildings destroyed

- SDCC activated for 38 days in total

- More than 63 Emergency Alerts issued
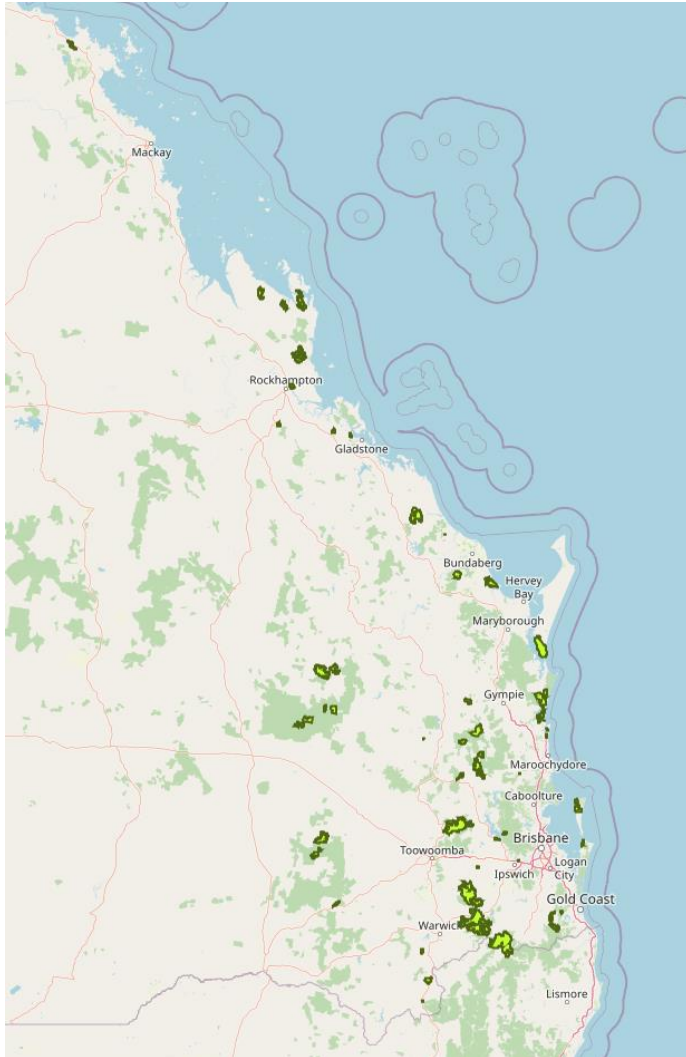
Figure 13 GIS Mapping showing Fireline scans for Queensland fires.

A drier wet season

TC Esther

Esther formed from a tropical low, which was identified in the Gulf of Carpentaria on 21 February 2019. The low reached tropical cyclone strength and was named TC Esther in the southern area of the Gulf at 4am on 24 February. The system then tracked south west, moving to the north of Mornington Island. The system maintained category 1 intensity as it made landfall just east of the Queensland-Northern Territory border at 11am, 24 February. Esther was downgraded to a tropical low moving west through the Northern Territory and crossing into Western Australia. The low turned along the WA coast and was on a track to cross back into Queensland, however the system lost energy, dissipating as it crossed the Queensland border.
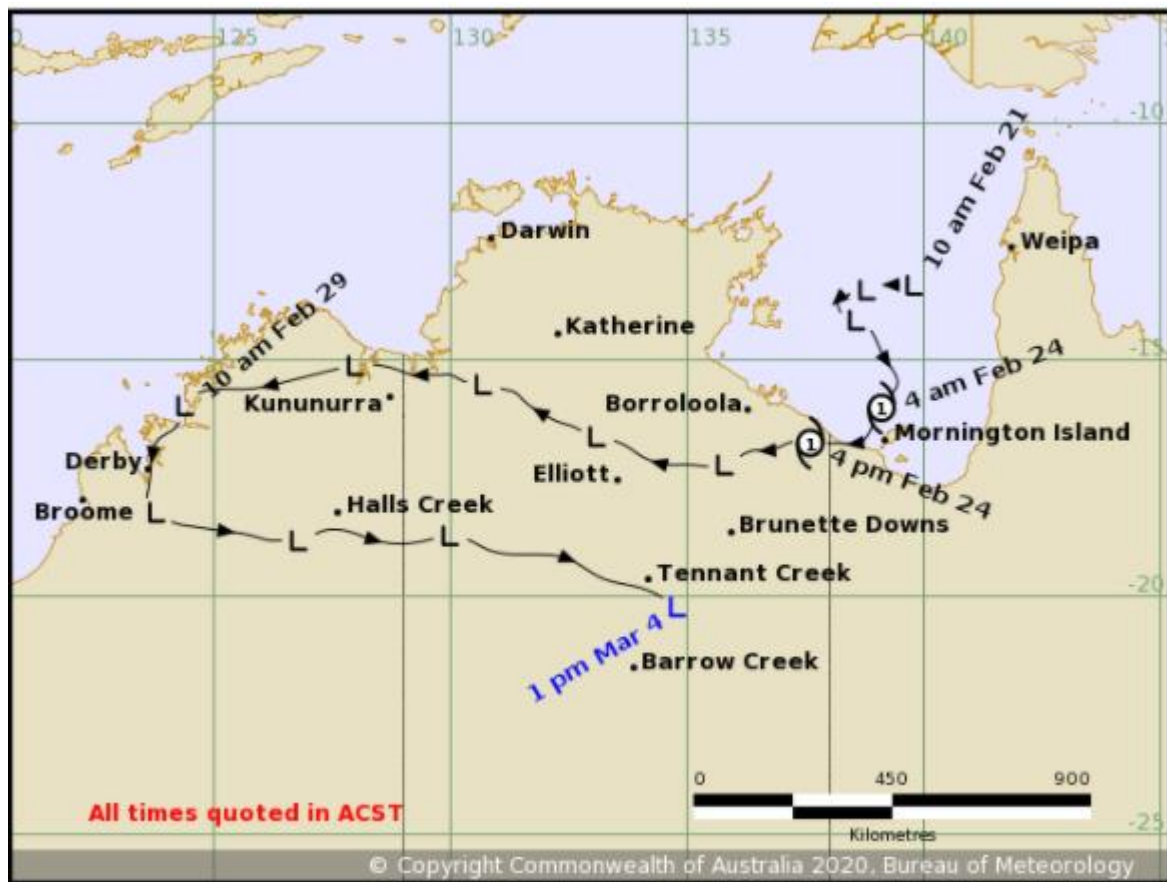
Figure 14 BOM Track path for TC Esther and associated tropical low (Source BOM)

Mornington Island residents reported localised flooding with no impact to dwellings. Damage assessments concluded that only minor damage occurred to dwellings with no structural damage reported. Utilities were reportedly unaffected during the event. Storm surge was recorded to Gulf communities with no impact reported. No SES jobs were recorded in TAMS.

Western & South-Eastern Severe Weather January & February

Above average rainfall in late January and into February 2020 saw significant flood levels recorded in parts of western, southern, and eastern Queensland. Affected catchments included the Georgina, Eyre, Logan, Albert, Condamine, Balonne, and Warrego catchments.

Heavy rainfall was recorded in northwest Queensland in late January and the resulting floodwaters extended downstream on the Georgina River toward the Eyre Creek. In early February heavy rainfall in the Logan, Albert, Condamine, Noosa, and Mary River catchments was river level rises that impacted several townships including heavily populated areas around Logan City, Warwick, Dalby, Chinchilla, Tewantin, and Gympie. The SDCC Watch Desk sent 11 Watch and Act EA warnings to areas affected by the floods.

Activation Statistics: Severe Weather 12-20 February	
SDCC total days at increased activation levels (12-20 Feb)	9
Number of Emails Received	1,734
Number of Emails Sent	68,276
Number of SMS Sent	13,636
Number of Tasks Completed	516
Number of Reports Disseminated	398
Number of Emergency Alerts Issued	12
Number of Weather Warnings Issued	226
Number of SES tasks monitored during activation period	955

Table 4 SDCC Statistics for Severe Weather event for Western & South-eastern severe weather

The second half of February saw heavy rainfall around the Warrego and Maranoa regions with major flood levels seen at Surat, St George, Dirranbandi, Bollon and Quilpie.

COVID-19, a new way of life

A new strain of coronavirus was first detected in Wuhan, China at the end of 2019. Designated COVID-19 by the World Health Organisation (WHO), the virus spread quickly globally from China. The infancy of this new virus strain meant that health professionals had no vaccine to combat it's impacts. Those at most risk are those with a compromised immune system, individuals with chronic medical conditions, the elderly, Aboriginal & Torres Strait Islander people and those in grouped living settings such as unit complexes and detention centres.

On 28 January 2020, Queensland recorded its first case of COVID-19, an international visitor of the Gold Coast. On 29 January the Queensland Government, through the Chief Health Officer, declared a public health emergency. In response, the SDCC activated on 2 February and remained at Stand Up for the remainder of the financial year. This will be the longest activation for the SDCC, 150 days, and is still ongoing.

Disaster management groups activate in response to Queensland Health support. For months, almost all local and district DMGs are at some heightened activation level. To better support Queensland Health's response to the virus, the SDCC partially moved staff into the State Health Emergency Coordination Centre (SHECC) for four months. The main role of the SDCC during this event is to support with the accommodation of returning travellers from other states and overseas. The SDCC also supported DMGs and agencies to respond to and begin the recovery from COVID-19.

The Watch Desk issued four Emergency Alert messages out to communities to advise them of the establishment of restrictions, including those in indigenous communities. Requests also passed through the Watch Desk for SES assistance at border and airport checkpoints. These operations continue into the 2020/21 year.

At the end of the financial year, Queensland had recorded 1,067 COVID-19 positive cases and 6 deaths with more than 370,900 COVID-19 tests being conducted.

Activation Statistics: Covid-19 2 February - EOFY	
SDCC total days at increased activation levels (2 Feb- EOFY)	150
Number of Emails Received	20,875
Number of Emails Sent	597,030
Number of SMS Sent	76,941
Number of Tasks Completed	5,186
Number of Reports Disseminated	6,522
Number of Emergency Alerts Issued	4

Table 5 COVID-19 SDCC Statistics Feb to EOFY

Other Significant Events

Talgai Dam

In the early evening on Friday 14 February 2020 a leak in a private irrigation dam in Talgai (around 60km south of Toowoomba) was reported which led to a series of warnings and evacuations in the area. Initial concerns suggested the dam may fail which would cause flooding to several properties in the area. Southern Downs Regional Council requested an EA message to be sent to people in the potential impact zone advising to evacuate to a safer location. The EA campaign was prepared by the SDCC Watch Desk and distributed. QPS evacuated nine properties under the Public Safety Preservation Act (PSPA). The dam was inspected by private engineers and State Government representatives which identified a reduction in outflow of water. The PSPA was lifted, and most residents could return to their homes on 16 February.

Nuclear Powered Warship Visit

In July 2019, several United States Navy nuclear powered vessels arrived in Brisbane and remained in port for several days. Due to the nature of this event, the SDCC assisted the Commonwealth Government, Military, and State Government by collecting and reporting on relevant information in relation to safety and security.

Figure 15 SDCC Agency Representative Liaisons working during a SDCC Activation 2019

Looking forward

As we move into the 2020/21 season, COVID-19 is at the forefront of disaster management response. Coordinated efforts across the QDMA and at a national level help to protect the public and return life to normal. Restrictions, which have some impact on daily life, hope to reduce the spread of the virus. The continual risk of the virus has potential impacts for our 'usual' risks in Queensland. Close contact while in cyclone shelters or in evacuation centres during bushfires pose a risk to disaster management personnel and the community. The continual impact to the economy and social restrictions has flow on effects to the mental health of Queenslanders. These are all additional challengers faced by all.

The Royal Commission into National Natural Disaster Arrangements will reflect on the catastrophic bushfire season experienced across the nation. Queensland emergency services and bushfire stakeholders will give evidence into one of the worst bushfire seasons in Queensland's history. Recommendations from the Royal Commission may help key decision makers improve on technology, policies and practises to ensure a safer community.

The BOM issued a La Nina Watch in June, leading to wetter conditions through Spring. This expected weather will bring cooler days, more tropical cyclones and an earlier onset of the wet season in the north. While this should reduce the bushfire risk compared to last year, the risk of severe bushfire days is always there.

The SDCC will continue to develop its processes and policies to align to best practice. The centre will continue to support disaster management groups, agencies and the community to protect life, property and the environment, no matter what disaster is thrown at Queenslanders.

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Appendices

Acronyms

ADF: Australian Defence Force

ASR: Agency Support Request

BoM: Bureau of Meteorology

DDMG: District Disaster Management Group

EA: Emergency Alert

EMPU: Emergency Management Planning Unit

EMS: Event Management System

FFDI: Forest Fire Danger Index

LDMG: Local Disaster Management Group

LGA: Local Government Area

PSBA: Public Safety Business Agency

QDMA: Queensland Disaster Management Arrangements

QDMC: Queensland Disaster Management Committee

QEMR: Queensland Emergency Management Report

QFES: Queensland Fire and Emergency Service

QPS: Queensland Police Service

SAP: Situational Awareness Platform

SDCC: State Disaster Coordination Centre

SDCG: State Disaster Coordination Group

SES: State Emergency Service

SEWS: Standard Emergency Warning Signal

SHECC: State Health Emergency Coordination Centre

SMS: Short Messaging Service

SOCB: State Operational Coordination Branch

STC: Severe Tropical Cyclone

TAMS: Task and Management System

TC: Tropical Cyclone

WHO: World Health Organisation

WoG: Whole of Government

Glossary

Activation: A state of operational change due to a significant weather or other disaster related event. Additional staff and resources become available to deal with the event.

Bureau of Meteorology: An agency of the Australian Federal Government responsible for providing weather services to Australia and surrounding areas.

Damaging Winds: Sustained winds of gale force (63 km/h) or more or wind gusts of 90 km/h or more.

Destructive Winds: Where winds are gusting to greater than or equal to 125km/h.

Dwellings: A house, flat, or other inhabited place.

Emergency Alert Campaign: Where Emergency Alert messages are sent to fixed line and mobile telephones within a defined polygon in response to an identified incident.

Event Management System: A cloud based software system used by SDCC staff and stakeholders.

Forest Fire Danger Index: A measuring index based on dryness of the land and air, temperature, humidity, and wind speed and direction.

Hectares: A unit of measurement equal to 10,000m².

Major Flood Warning: Extensive rural areas and/or urban areas are inundated. Many buildings may be affected above the floor level. Properties and towns are likely to be isolated and major rail and traffic routes closed. Evacuation of flood affected areas may be required. Utility services may be impacted. (Bureau of Meteorology, 2019)

Monsoon Low: A seasonal low pressure system that has similar characteristics to a tropical cyclone but did not develop. Generally, the monsoon low forms in northern Australia during the monsoon season. (YANAI, 2004)

Monsoon Trough: A lineated area of low pressure at the southern end of the monsoon, that affects northern Australia during the monsoon season. (Sugata Narsey, 2016)

Operational Tasks: Tasks performed by staff in the SDCC directly related to disaster and emergency management roles.

Public Safety Business Agency: Queensland State Government agency responsible for providing information and communications technology, financial, procurement, asset management and human resources services to QFES and other state government agencies.

Queensland Disaster Management Arrangements: Comprise a four-tiered system: three levels of government – local, state and federal – and an additional state government tier between local and state levels known as disaster districts. These disaster districts enable a more efficient and effective operational service delivery in support of local communities and address the size, complexity and diversity of Queensland. (Qld Government, 2018)

Queensland Disaster Management Committee: The Queensland Disaster Management Committee (QDMC) provides strategic direction and State-level decision making for disaster management within the State and ensures PPRR activities are coordinated from a whole-of government perspective and based on an all hazards approach. (QFES, 2018)

Severe Weather Events: In the context of this report, an event that causes a warning to be issued to the public or likely to cause disruption to general services in the community.

Standard Emergency Warning Signal: A warning signal that is broadcast immediately prior to major emergency announcements on television, radio, and other communication systems.

State Health Emergency Coordination Centre: The State Health Emergency Coordination Centre (SHECC) is the peak emergency coordination centre for state health response to an emergency incident, disaster or public health incident of state significance.

State Operational Coordination Branch: The State Operational Coordination Branch ensures that QFES maintains a state of operational readiness to fulfil its responsibilities. The Branch is responsible for state-wide monitoring and reporting on all disaster and emergency related issues impacting, or potentially impacting, Queensland within QFES and to all disaster managements stakeholders.

Task and Management System: A software program customised for use in the organising and coordinating SES response to requests for assistance.

Tropical Cyclone: A tropical depression of sufficient intensity to produce sustained gale force winds (sustained winds of 63 km/h or greater with gusts in excess of 90 km/h). (Weatherzone, 2020)

Tropical Low: An area of low pressure that generally precedes the formation of a tropical cyclone. (Weatherzone, 2020)

Tsunami: Tsunami are waves caused by sudden movement of the ocean surface due to earthquakes, landslides on the sea floor, land slumping into the ocean, large volcanic eruptions or meteorite impact in the ocean.

Activation Statistics

Extreme Fire Conditions – QFES Operation Redux 5-24 September 2019

Activation Statistics: Extreme Fire Conditions 5-24 September	
SDCC total days at increased activation levels (5-24 Sept)	20
Number of Emails Received	4,260
Number of Emails Sent	75,485
Number of SMS Sent	12,857
Number of Tasks Completed	527
Number of Reports Disseminated	492
Number of Emergency Alerts Issued	25
Number of Weather Warnings Issued	73
Number of SES tasks monitored during activation period	38

Extreme Fire Conditions – QFES Operation Redux 8-25 November 2019

Activation Statistics: Op Redux 8-25 November	
SDCC total days at increased activation levels (8-25 Nov)	18
Number of Emails Received	4,558
Number of Emails Sent	106,516
Number of SMS Sent	21,055
Number of Tasks Completed	563
Number of Reports Disseminated	568
Number of Emergency Alerts Issued	38
Number of Weather Warnings Issued	104
Number of SES tasks monitored during activation period	336

Severe Weather – 12 – 20 February 2020

Activation Statistics: Severe Weather 12-20 February	
SDCC total days at increased activation levels (12-20 Feb)	9
Number of Emails Received	1,734
Number of Emails Sent	68,276
Number of SMS Sent	13,636
Number of Tasks Completed	516
Number of Reports Disseminated	398
Number of Emergency Alerts Issued	12
Number of Weather Warnings Issued	226
Number of SES tasks monitored during activation period	955

Tropical Cyclone Esther – 24 February 2020

Activation Statistics: TC Esther 24 February	
SDCC total days at increased activation levels (24 Feb)	1
Number of Emails Received	198
Number of Emails Sent	17,553
Number of SMS Sent	1,910
Number of Tasks Completed	108
Number of Reports Disseminated	61
Number of Emergency Alerts Issued	0
Number of Weather Warnings Issued	51
Number of SES tasks monitored during activation period	44

COVID-19 2 February to End of Financial Year

Activation Statistics: Covid-19 2 February - EOFY	
SDCC total days at increased activation levels (2 Feb- EOFY)	150
Number of Emails Received	20,875
Number of Emails Sent	597,030
Number of SMS Sent	76,941
Number of Tasks Completed	5,186
Number of Reports Disseminated	6,522
Number of Emergency Alerts Issued	16
Number of Weather Warnings Issued	1,438
Number of SES tasks monitored during activation period	2,923