

# Our performance

This section reports on the priority areas and strategic initiatives of the QFES Strategic Plan 2020–2024 and is a sample of the department’s performance highlights from 2020–21. It is not representative of all work undertaken during this period.

## Priority area

### 1. Volunteerism, people and culture

#### 2020–2024 Strategic initiatives

- » Empower Queenslanders to contribute and/or volunteer by providing flexible opportunities.
- » Attract, retain and develop a talented and diverse workforce.
- » Provide safe, healthy and inclusive workplaces.
- » Deliver a leadership strategy that builds a pipeline of capability for the future.
- » Involve volunteers early in decision-making and lessons management processes.

## Volunteerism Strategy

Volunteers are critical to the successful delivery of fire and emergency services in Queensland and are essential in building community capacity and enhancing community resilience.

QFES has approximately 36,000 dedicated volunteers across the state in the RFS, SES, Research and Scientific Branch Volunteer Scientific Officer network and AUS-1 DART, and Auxiliary Support Officers, Peer Support Officers and Chaplains.

The QFES Volunteerism Strategy, launched in October 2018, aims to support a robust and flexible contemporary volunteer model which reflects best practice, innovation and social trends across volunteerism and embed these models in the QFES culture and ethos.

The Volunteerism Strategy’s Implementation Program contains nine projects with 27 deliverable activities that align with the strategy’s strategic priorities and guiding principles. The key themes are:

- » Recruitment and Onboarding
- » Leadership Development
- » Honours and Awards
- » Training
- » Engagement
- » Sustainability
- » Identity and Communication
- » Well-being
- » Consultation.

The implementation program has been developed to realise the intention of the Volunteerism Strategy through tangible projects that will strategically and sequentially facilitate the improvements that have been identified as priorities for volunteers, volunteering and volunteerism within the department and the Queensland community. The implementation program is expected to be completed by December 2022.

During the reporting period, the department:

- » established a Volunteerism Strategy Implementation Program Working Group which convened on six occasions. The group comprises representatives from FRS, RFS, SES, QFES People and EMCC. The purpose of the working group is to provide stewardship, advocacy and governance of Volunteerism Strategy related matters within QFES.
- » launched the QFES Leadership Framework Foundation Programs and delivered two pilots of the Leading Self program.
- » continued to support delivery of the Emergency Service Volunteer Pin with 32,435 pins distributed since the launch in 2019.
- » increased promotions of award and recognition opportunities for volunteers.
- » improved nomination processes for the Diligent and Ethical Services Medal and QFES Medal to allow for self-nomination. Online forms are being created.
- » enhanced promotions of volunteer contributions and achievements through multiple mediums.

- » increased online engagement with volunteers through the Volunteers@QFES closed Facebook group which has approximately 1,600 members.
- » established Regional Volunteer Advisory Committees (or similar function) in a number of QFES regions.
- » commenced exploration of a digital mindfulness program for optional access by all volunteers.
- » amended governance documentation to ensure consultation with volunteers.

The QFES Volunteerism Strategy is available at: [www.qfes.qld.gov.au](http://www.qfes.qld.gov.au)

## Safety for children (Blue cards)

QFES continued blue card screening for the identified staff and volunteer roles that have been assessed as regulated employment pursuant to the *Working with Children (Risk Management and Screening) Act 2000* (WWC Act).

The safety of children is of paramount importance to the Queensland Government and blue cards are one of a range of measures in place to protect children in Queensland along with the government's 'No Card, No Start' policy which came into effect on 31 August 2020.

Since June 2019, QFES has delivered a persistent awareness campaign to implement the blue card requirement. This included as much individualised and personal contact as possible for staff and volunteers identified as requiring a blue card under the WWC Act.

This campaign escalated from awareness—encouraging individuals to apply—to directing staff and volunteers to apply. The approach was predicated on the legal obligation that the Commissioner, as the employer, has under the WWC Act to not allow a person to start or continue in regulated employment (including volunteering) if the person does not hold a current blue card.

QFES is continuing to support staff and volunteers who need to apply for their blue card to be able to continue in their role protecting the community.

Supporting the implementation of the blue cards is the QFES Safety for Children Risk Management Strategy (June 2020).

During the reporting period, QFES:

- » continued the management of QFES blue card holders alongside individuals who required a blue card and were yet to apply.
- » designed and implemented an improved system and associated processes to manage the blue card program of work.

## Integration of staff from PSBA

Following the announcement of the intended disestablishment of PSBA in September 2020, a total of 154 staff were identified to transition from PSBA to QFES. The functions of Human Resources, Finance, Procurement, Assets, Fleet, Property and Facilities Management and staff from the Office of the Chief Operating Officer, transitioned to the QFES operating model throughout the first half of 2021 and will officially transition to QFES from 1 July 2021.

Activities undertaken to onboard PSBA staff to QFES included tailored induction forums, impact assessments, the development of transition plans and the establishment of working groups to support staff and identify and mitigate issues. Leading change forums regarding supporting employees through change were also held for senior leaders from QFES and incoming leaders from PSBA.

The transition of discrete functions to QFES from PSBA Frontline and Digital Services is ongoing.

The Internal Audit function, including the Head of Internal Audit for QFES, moved in its entirety from PSBA to the administrative stewardship of the QPS on 30 November 2020, however, will continue to provide a service to QFES.

## Strategy and Corporate Services Division realignment

A review and realignment of the Strategy and Corporate Services Division was undertaken in line with the integration of PSBA functions and staff to QFES to ensure enhanced alignment of the department's support functions. The independent review of QFES will further examine the effectiveness, efficiencies and sustainability of the services delivered by the department.

## Rural Fire Development Framework

In April 2021, phase 1 of the Rural Fire Development Framework (RFDF), which includes QFES Foundation Skills and Firefighter Minimum Skills, was launched to regional Training and Support Officers. The RFDF is a revised training structure, linking training to the department's volunteers and their roles. By aligning training courses to RFS roles, volunteers can develop and maintain the necessary skills to perform their duties whilst keeping themselves and the community safe. This is achieved through enhancing the capability of volunteers training volunteers and providing flexible delivery options based on local needs.

Ongoing train the trainer initiatives will support further regional engagement and assist to build capability through phase 2 of the program delivery scheduled for launch by 31 December 2021. Phase 2 of the RFDF includes Firefighter Advanced Skills and Crew Leader Skills.

The program is supported by a team of content matter experts from the SFEST (Volunteer Emergency Services Training Command) and an agreed 12-month consolidation program to ensure program longevity.

Volunteers successful in completing the new units within the framework have the ability to be awarded Certificate III in Public Safety (Firefighting Operations). This is the first time this competency has been offered as a clear training pathway for volunteers.

## Grants—RFS and SES

QFES continued to provide support to rural fire brigades and SES groups and units to identify, plan, apply for and complete grant applications. During the reporting period:

- » RFS State Office presented 41 RFS grants to rural fire brigades totalling \$524,585. This funding provided for the installation of toilets and washing facilities, station extensions, improvements to training facilities and the installation of solar systems to reduce emissions and alleviate expenses in utilities.
- » QFES sponsored 18 successful external grant applications for SES groups and units with successful applicants receiving more than \$523,000. Grants projects included facility upgrades, computer equipment, vehicle canopies and equipment for training and emergency activations.

## PCYC Queensland Emergency Services Cadets

QFES continued to support the Emergency Services Cadets Program aimed at building community resilience through the fostering of the next generation of emergency services personnel.

At 30 June 2021, the program has 470 young Queenslanders (aged 12-17 years) supported by 171 adult leaders and 100 active emergency services personnel in 22 cadet units.

During the reporting period:

- » new cadet units were established at Gin Gin, Highfields and Somerset (Brisbane Valley), with new units in the process of launching in Emerald, Beaudesert and North Brisbane. In addition, the Hervey Bay unit was relaunched at Torquay Fire and Rescue Station.
- » the Torres Shire Emergency Services Cadet Unit on Thursday Island was awarded the Partnership category in the Closing the Gap Award. The award is an initiative to reduce Indigenous disadvantage in health, education, employment and social justice. The unit, with 30 members, was nominated for its outstanding work in building opportunities for young Aboriginal peoples and Torres Strait Islander peoples in the Torres Strait.
- » twenty cadets completed the Certificate II in Public Safety (State Emergency Service) via a combination of online, virtual interactive and face-to-face learning experiences over 12 months.
- » the Cadet Games took place in Brisbane at PCYC Sandgate on 19 June 2021. Participants included cadets from the Emergency Services Cadets Program, RFS and SLSQ and Australian Navy Cadets, Australian Army Cadets, Royal Australian Air Force Cadets and Military Cadets. The games and cadets were supported by volunteer judges from the emergency services and Australian Defence Force.
- » the Adult Leader Conference was held in December 2020 in Brisbane. Three volunteer Adult Leaders from each Emergency Services Cadet Unit were invited to attend the conference. Five-year service badges and Emergency Service Volunteer Pins were awarded to eligible Adult Leaders.

In addition, a new three-year Service Agreement between QFES and PCYC Queensland was announced on 29 June 2021 to continue delivery of the Emergency Services Cadets Program. Funding totalling in excess of \$2 million for the term of the agreement is the largest single investment in the program since its establishment.

## Extended Reality Training

The current QFES capability of Extended Reality Training embedded various tools at the SFEST with deployment to the regions during the reporting period. These tools include using head mounted displays with 360-degree video of real world environments such as compartment fires and virtual reality firefighting tools such as the Flaim Extinguisher and Flaim Trainer using haptic based wearable technology with computer generated virtual environments for practising tactical firefighting. In addition, three mobile kits comprising a laptop computer and data projectors with virtual reality command software for training situational awareness and establishing command are available. The head mounted displays, the Flaim Extinguisher and mobile command training are being used in Central Region and will be redeployed to Northern Region by 31 December 2021.

The Digital Learning Deployment Unit, at the SFEST, is coordinating the deployment and maintenance of the extended reality equipment across the QFES regions for staff and volunteers. The coordination involves identifying the content to support learning programs such as recruit training with head mounted displays to experience compartment fire behaviour. Other content involves developing computer generated environments for incidents involving solar panels. This environment will be used to train staff and volunteers in how to manage the risks associated with solar panels.

## Other key achievements include:

- » Appointed eight additional firefighters (completing the appointment of an additional 100 firefighters) and 12 fire communications officers in line with the government's 2017 election commitment to provide an additional 100 firefighters and 12 fire communications officers. The delivery of this commitment provides increased capability and ensures communities continue to receive quality services.
- » Appointed 48 additional firefighters at 30 June 2021 in line with the government's 2020 election commitment to provide an additional 357 firefighters over five years (commencing 2020–21) enhancing QFES' capability and capacity to respond effectively to community demand into the future.
- » Developed and implemented a RFS volunteer online Expressions of Interest tool available via the QFES website to enhance RFS recruitment processes, assist in attracting new members to

brigades and make it easier for potential new members to apply.

- » Developed the QFES Uniforms and PPE lookbook and service specific Uniforms, PPE and Equipment catalogues. The lookbook outlines how and when to wear the uniform and PPE, while setting the expected dress standard when representing QFES. Extensive consultation with staff and volunteers informed the development of the lookbook and catalogues. The lookbook and catalogues are available on the QFES Gateway (staff intranet) and are updated as necessary.
- » Introduced a new FRS insignia and shoulder badge to reflect the FRS's individual service identity. The insignia and shoulder badge are progressively being implemented across the FRS suite of uniforms and products commencing with helmets and flags.
- » Developed and implemented an enhanced decontamination process to reduce the risk of firefighters being exposed to toxic substances while fighting fires and handling contaminated equipment. The updated process was developed through the Firefighter Safety Working Group and has a focus on maintaining respiratory protection longer after fire related incidents and removing contaminated clothing quicker to reduce the transition of accumulated contaminants.
- » Completed the analysis of QFES workforce data to enable the department to develop considerations for consultation with the other Safe Crewing Taskforce signatories, which will contribute to development of the Safe Crewing Taskforce final report. Discussions are continuing with the other taskforce members on their considerations for input into the final report. The taskforce was established under *The Queensland Fire and Emergency Services Certified Agreement 2019* to undertake research and provide findings, advice, guidance or recommendations regarding the provision of safe crewing for those employment positions covered by the Agreement.
- » Provided funding of \$7.7 million (GST inclusive) to SLSQ to support the operations of 57 surf lifesaving clubs, six branches and the state headquarters. With a volunteer base of approximately 34,000, SLSQ provides lifesaving services, public safety education, surf sports, fundraising and commercial training. A new Service Agreement for the period 1 July 2021 to 30 June 2024 has been signed, delivering \$23 million (total of \$30 million over four years commencing 2020–21), representing the largest investment in SLSQ by the Queensland Government.

- » Continued support for RLSSQ through funding of \$448,465 to support the operations of the Ithaca-Caloundra, Neptune (Palm Beach) and Airlie Beach clubs and the delivery of swim and survive programs, water safety programs and aquatic risk management.
- » Hosted two RFS Volunteer Summits, one in Cairns in May 2021 and one on the Sunshine Coast in June 2021. More than 250 RFS volunteers attended the two events. The summits provided the opportunity for RFS volunteers to come together, learn and develop their skills with a focus on peer-to-peer knowledge sharing and developing best-practice models. The two-day program for each event included presentations on training pathways for the future, intelligence and data capture, aerial firefighting, mental health awareness, working with Indigenous communities, traditional burning, leadership and the RFS Blue Print (the RFS strategic road map detailing short and long term initiatives). In addition, the 2021 RFS Volunteer Brigades' Charter was signed at the Sunshine Coast Summit. The Charter is an agreement between the State of Queensland, QFES and the RFBAQ which ensures that the State of Queensland and QFES will commit to consultation with volunteers regarding matters which might reasonably be expected to affect volunteers.
- » Celebrated Peer Support Week in March 2021 to show appreciation for the contribution the department's Peer Support Officers make to the wellbeing of all QFES members. Peer Support Week also acknowledged the outstanding efforts of 10 regional Peer Support Officers as well as one statewide award for Peer Supporter of the year.
- » Celebrated SES WOW day on 19 May 2021 (Wear Orange Wednesday) —the national day to celebrate and thank SES volunteers. On this day, the community takes the opportunity to thank SES volunteers in Queensland and around the country for their dedication and tireless devotion to their communities.
- » Celebrated SES Week in October 2020 honouring the hard work, dedication and commitment that represents the spirit of SES volunteers and staff. SES Week events included regional events and award presentations for volunteers and units who have gone above and beyond their duties to support their communities. In addition, a new principal community partnership with Suncorp was celebrated.
- » Commenced preparations for RFS Week to be celebrated in August 2021. RFS Week recognises and acknowledges the dedication of RFS volunteers and their commitment to helping keep Queensland communities safe. RFS Week 2021 will see the introduction of the State Young Volunteer of the Year Award and Regional Young Volunteer Awards. The Young Volunteer of the Year Awards form part of the suite of Regional and State Volunteer of the Year Awards presented during RFS week to acknowledge volunteers aged 16–25 years who have demonstrated a special contribution to the service. During RFS Week, 18 awards will be presented across the state.

For further information addressing the strategic initiatives under this priority area, refer to Human Resources (pages 78–82).

# Working for Queensland and Volunteering for Queensland surveys

The results of the Working for Queensland (WfQ) and Volunteering for Queensland (VfQ) surveys, conducted in September 2020, revealed the majority of QFES staff and volunteers feel motivated and inspired by their work.

More than 4,600 QFES staff and volunteers participated in the surveys. Among the most positive results were:

- » taking pride in working for QFES
- » understanding how our work contributes to QFES' objectives
- » incorporating the QFES values into our work.

There was a strong agreement across the department about feeling a personal attachment to QFES and its work.

The surveys are a confidential forum enabling QFES to gauge its performance collectively and in each division, regionally and down to the work unit level.

QFES considers the surveys an opportunity to hear the workforce views and understand their lived experiences. The results are taken seriously and are used as a key evidence-base for decision-making at all levels in the department.

The results are considered and progressed to key actions (both strategically and tactically) designed to focus on positive work environments and experiences that are centred around shared values.

The following key areas have been identified for continued development and require further attention:

- » Volunteer On-boarding
- » Red Tape
- » Health, Safety and Wellbeing
- » Reward and Recognition
- » Professional Development and Training
- » Inclusion and Diversity
- » Negative Workplace Behaviours.

The surveys enable the department to continuously strengthen and improve as an organisation. Forums continue to involve staff and volunteers in developing actions to respond to the survey results.

## Our most favourable responses

### Working for Queensland

- I understand what is expected of me to do well in my job.  
92%
- I understand how my work contributes to my organisation's objectives.  
92%
- People in my workgroup are committed to workplace safety.  
88%
- People in my workgroup treat customers with respect.  
87%
- People in my workgroup are committed to delivering excellent service to customers.  
85%

### Volunteering for Queensland

- I understand what is expected of me to effectively do my volunteer role.  
94%
- I am proud to tell others I volunteer for my organisation  
87%
- People in my team are committed to workplace safety.  
68%
- My volunteering gives me a feeling of personal accomplishment.  
68%
- I understand how I contribute to QFES objectives.  
58%

### Response scale

FAVOURABLE	NEUTRAL	UNFAVOURABLE
POSITIVE	NEUTRAL	NEGATIVE
Agree Strongly agree	Neither agree nor disagree	Disagree Strongly disagree

# Supporting inclusion and diversity

Queensland has an increasingly diverse population which QFES considers in the development and delivery of its programs and services to build safe and resilient communities and ensure community preparedness for disaster events. QFES values the inclusion of individuals who contribute to the department through their diverse skills, knowledge and experience.

During the reporting period, QFES:

- » adapted the long-standing Fire Ed Program, in consultation with AEIOU Foundation for Children with Autism, to ensure an inclusive learning environment for children with autism. The program was updated to include modified language, adjustments to fire drill activities and a focus on physical props to ensure children with autism are prepared should a fire start in their home. Following a successful trial of this adapted Fire Ed program in April 2021, it will be rolled out through the AEIOU Foundation centres across Queensland.
- » continued to assist members of the deaf community and people who have a hearing impairment to install specialised smoke alarms through the Smoke Alarm Subsidy Scheme managed by Deaf Services Queensland, with 154 deaf and hard of hearing smoke alarms provided.
- » provided Auslan interpreters when broadcasting fire and emergency safety information.
- » hosted the Public Safety Agencies International Women's Day on 8 March 2021 to celebrate the inspiring women within the public safety agencies and encourage conversations about gender equality. More than 300 people from across the state tuned in virtually to hear a panel discussion exploring the United Nations theme of *Women in leadership: Achieving an equal future in a COVID-19 world*. Staff and volunteers were also recognised for their outstanding contributions to embracing gender equality and promoting the rights and wellbeing of women in QFES.
- » collaborated with The University of Sydney and Queenslanders with Disability Network to promote the new Person-Centred Emergency Preparedness (P-CEP) Workbook. The workbook is a conversation guide that people with disability can use to tailor emergency preparedness planning to their strengths and support needs. The workbook covers the areas of social connectedness, transportation, assistive technology, management of health, personal support, communication, assistance animals and living situation.
- » conducted a pilot workshop, in collaboration with Guide Dogs Queensland, to support vision-impaired clients to better understand their disaster risks and be prepared for emergencies using the P-CEP toolkit.
- » developed a home fire safety visual guide for people from culturally and linguistically diverse communities to ensure they have the tools to avoid fire risks in the home. The guide was developed in consultation with Multicultural Australia and Community Action for a Multicultural Society Nambour ([www.qfes.qld.gov.au](http://www.qfes.qld.gov.au)).
- » expanded the Road Attitudes and Action Planning (RAAP) program throughout Queensland and into more diverse areas and education settings, with delivery of the program into a number of Indigenous communities and youth detention centres, and in conjunction with youth justice programs. This expansion was undertaken in collaboration with the National Indigenous Australians Agency, QPS Indigenous Liaison Officers, local Elders and local Indigenous media groups. RAAP is a practical lifesaving road safety awareness program for young drivers, facilitated by operational firefighters.
- » was recognised in every category of the 2020 Women and Firefighting Australasia Awards including receiving the Diversity, Fairness and Inclusion Award. This award recognises QFES' dedication to diversity and inclusion, particularly the partnership between QFES and not-for-profit organisation CareerTrackers. QFES participates in the Indigenous Internship Summer and Winter Programs each year, enhancing the participation of Indigenous peoples and Torres Strait Islander peoples in Queensland.
- » continued delivery of the *Starting the Journey* learning program providing insight into interpreting people's own culture as well as the lived experiences of Aboriginal peoples and Torres Strait Islander peoples.
- » continued delivery of QFES Allies of Inclusion program which builds an internal network of staff and volunteers committed to their workplaces being safe, healthy and inclusive of everyone.

- » was represented by a QFES Indigenous senior leader at the Australia and New Zealand School of Government 2021 Proud Partnerships in Place First Peoples Conference. The conference explored how public services need to rethink the way they relate with Indigenous communities and examined how successful partnerships have evolved and the positive results they have delivered for communities particularly during COVID-19.
- » participated in several cultural burns with QFES officers learning from traditional owners about Indigenous cultural fire management practices. QFES' engagement with Indigenous communities included training with Indigenous fire practitioners.
- » established eight new Bushfire Safety Officer positions to be filled by First Nations peoples with the aim of ensuring traditional learnings are embedded into QFES into the future.
- » commenced development of an Indigenous Land and Fire Management training program.



## Priority area

# 2. Systems and intelligence

### 2020–2024 Strategic initiatives

- » Streamline and digitalise business processes so they are accessible and intuitive.
- » Connect systems, information and people for enhanced decision-making.

## Catalyst and SABRE

Catalyst continues to be used for Operation Cool Burn (OCB) (refer page 42) data capture and reporting, sustainable development and predictive services activities. Catalyst has continued to build on the single platform capabilities of data gathering, reporting and fire simulation to deliver a multi-tenure, integrated fire management system. Catalyst provides access to users from more than 80 organisations across Queensland, integrates planning and risk components through shared Geospatial Information Systems and provides levels of reporting dependent upon a user's role, function and authorisations.

SABRE (Simulation Analysis-Based Risk Evaluation) continues to be developed as a high-resolution operational decision support tool providing forward looking fire information for planners and responders alike. SABRE aggregates environmental information such as weather, atmospherics, fuel, regrowth and spatial location to deliver nuanced fire behaviour advice. Work is progressing to upgrade both the architecture and technology upon which the system is built, as well as to proof, document and refactor the data processing components. This refactoring will make SABRE products available in a more timely and reliable fashion with a view to cross system availability.

## SES Onboarding Project

At 30 June 2021, SES groups within South East Queensland are equipped with over 1,700 GWN compatible vehicle and portable hand-held radios enabling them to communicate with QPS, QAS and other emergency services using the same radio communications platform.

Additionally, the project equipped other SES groups across Queensland with 4,500 new enhanced portable radios to operate outside areas covered by the GWN. It also delivered an upgraded TAMS (Task and Management System) with improvements designed to support and enhance SES operations into the future. TAMS provides for the tasking of SES to incidents and updating after response and includes reporting functions.

## ICT Investment Plan

The QFES ICT Investment Plan identifies the major ICT activities proposed to be undertaken during 2021–22 that directly contribute to the *Strategy 2030* Guiding Principles, the department's strategic plan, QFES Digital Principles and the Queensland Government's digital strategy for 2017–2021 *DIGITALIST*.

Since November 2019, QFES has made a concerted effort to improve governance arrangements associated with ICT program delivery including establishing an ICT Governance and Portfolio Management Team.

The investment plan process underwent a maturity uplift during the reporting period including planning and prioritisation utilising risk and capability frameworks. Preparation of the plan was undertaken within a landscape which included a number of extenuating circumstances such as the PSBA disestablishment including the transition of Frontline and Digital Services to QPS and the Queensland Government's savings and debt plan.

The program of work developed in the investment plan was prioritised based on a QFES assessment of risk and capability growth and in alignment with the Office of Assurance and Investment criteria.

As at 30 June 2021, some of the ICT program of work 2021–22 projects are underway with the majority expected to be delivered in 2021–22, whilst others will extend into the ICT Five Year Roadmap.

The 2020–21 program of work was severely impacted by fiscal restraints imposed by the response to COVID-19. Items that were completed include:

- » NBN Readiness Telephony System replacement
- » QFES SMS Telstra Access Manager Paging system replacement
- » QFES ArcGIS Mapping Systems Update
- » SES Onboarding Project.

## Information Management Framework

The objective of the QFES Information Management Framework is to underpin information management practices across the department and ensure that information and data resources are managed as a strategic asset, are trusted and accurate, support service delivery, are managed securely, meet compliance requirements, support decision-making, provide predictive insights and help measure the department's performance.

During 2020–21, QFES continued to mature the Information Management Framework with the finalisation of the Data Management Policy, Data Quality Standard, Data Quality Assessment Tool and Information Management Roles and Responsibilities Standard along with developing supporting guides and procedures.

The Queensland Disaster Management Data Coordination Initiative (QDMDCI) was also finalised. The QDMDCI is a QFES-led initiative to improve disaster management data coordination activities across all disaster management groups, including all levels of government, non-government organisations and private entities, with the aim of improving Queenslanders' ability to better plan, manage and respond to disaster events. To operationalise the data sharing initiative, QFES developed a framework to facilitate information sharing.

The framework is aligned to the Queensland Government Information Sharing Authorising Framework and the Queensland Government Information Security Classification Framework and includes:

- » Memorandum of Understanding (MoU)
- » Data Exchange Schedule
- » Data Catalogue
- » Data Dictionary.

To support disaster information sharing, QFES also developed a Disaster Management Data Coordination Portal as the platform to deliver on the data coordination and sharing activities across disaster management stakeholders.

QFES is committed to embedding strategic, consistent and structured enterprise-wide information security practices that align with the Queensland Government Information Security Policy (IS18:2018). The policy requires that all agencies must implement an Information Security Management System (ISMS) based on ISO 27001 Information Security Management. The function of an ISMS is to protect the confidentiality, integrity

and availability of information. In line with policy requirements, during the mandatory annual information security reporting process, the Commissioner attested to the appropriateness of the information security risk management within QFES to the Queensland Government Chief Information Security Officer, noting that appropriate assurance activities have been undertaken to inform this opinion and the department's information security risk position.

## Queensland Disaster Management Arrangements Data Sharing Group

QFES continued to support whole-of-government disaster management data sharing through the Queensland Disaster Management Arrangements (QDMA) Data Sharing Group on ArcGIS Online. The group allows data across PPRR phases of disaster management to be shared amongst members.

At 30 June 2021, there are more than 220 members from local, state and Australian Government bodies as well as non-government organisations, with 370 shared datasets.

This data helps inform the SDCC Situational Awareness Platform, which is made up of eight operational situational awareness web maps and dashboards.

## Computer Aided Dispatch

The Computer Aided Dispatch (CAD) Upgrade Project is delivering an upgrade of the existing QFES InformCAD (v5.7.28) to CAD Enterprise (V21.1.2.2.). The CAD is a mission and safety critical system that supports call taking (Triple Zero 000), dispatching, mobilisation, operations and coordination by enabling rapid deployment of resources to emergency incidents and situations. The upgrade will deliver enhanced functionality.

## Other key achievements include:

- » Introduced Advanced Mobile Location (AML) which allows most mobile phones and wearables (with SIM cards) to automatically send their device's location when they call Triple Zero (000). AML is an international standard being implemented across the globe. Queensland was an early adopter of AML and went live in December 2020. AML is accurate within a five-metre radius outdoors and a 25-metre radius indoors. It is activated when Triple Zero (000) is called and the location data is sent while the caller is talking to the Emergency Call Service. After the call, AML is deactivated. Implementing AML required centralised coordination of project activities between QFES, QPS, QAS and other states' police, fire and ambulance services. Work is ongoing on the next stages which include text and video methods of contacting Triple Zero (000).
- » Amended the FRS Damage Assessment data collection tool, following engagement with the QRA, to provide more comprehensive data to QRA and local governments following significant natural weather events. The enhanced data collection tool provides increased quality data and information from the initial damage assessments undertaken by the AUS-1 DART members of the FRS.
- » Supported development of innovative new features for the Emergency Response Decision Support System (ERDSS). The system supports firefighters' and other emergency responders' decision-making at a range of incidents such as hazardous materials, chemical spills, explosions, biological threats, nuclear accidents and illicit drug laboratories. Over the past decade, the department's Research and Scientific Branch has played a key role in the system's development in collaboration with the Australian Government, United States Federal Government and partners. The branch's expertise underpinned the development of the latest version of ERDSS which was released internationally in August 2020. The new version includes information on new hazardous materials as well as new and updated tools such as a radiation shielding tool.
- » Contributed to several working groups at the Emergency Management Spatial Information Network Australia national level including the rollout of a new web platform focused around disaster information sharing.

## Priority area

# 3. Service alignment

### 2020–2024 Strategic initiatives

- » Design and deliver services according to local risk and community need.
- » Lead locally trusted networks to prioritise risk reduction, preparedness and information sharing.

## Queensland Emergency Risk Management Framework

The Queensland Emergency Risk Management Framework (QERMF) was endorsed by the Queensland Disaster Management Committee in 2017 and allows disaster management stakeholders to understand, manage, and if required, communicate their disaster risks to the state and federal levels of government.

QFES continued to provide advice and support the implementation of the QERMF across Queensland's disaster management arrangements including in Woorabinda, Cook, Wujal Wujal and Hope Vale.

In 2020–21, an independent review of the QERMF to identify lessons and opportunities for improvement was undertaken. QFES commenced work to address the 15 key findings and 12 recommendations that resulted from the review to improve the way that the framework enables the prevention of new disaster risk, reduction of existing disaster risk and management of residual risk. The action plan will be implemented by a whole-of-government working group formed under the State Disaster Coordination Group with representation from across Queensland's disaster management arrangements.

## Queensland Bushfire Plan

QFES, in partnership with bushfire management stakeholders, developed the Queensland Bushfire Plan (the plan). The plan, released in July 2020, outlines the whole-of-government response arrangements for bushfire management in Queensland. The plan is underpinned by three principles—hazard mitigation, public safety, and collaboration and coordination. As lead agency, QFES has a critical role in implementing the plan across the state, with key responsibilities to ensure the safety of Queensland communities. The plan is a key document within Queensland's disaster management arrangements and is a sub-plan to the Queensland State Disaster Management Plan.

Developed following extensive research, benchmarking with other states and territories and feedback from stakeholders, the plan is a living document and will change to cater for any relevant recommendations from the Royal Commission into National Natural Disaster Arrangements final report (refer page 63).

Fire management groups and committees operate at the local, area, regional and state level. In total, there are more than 50 Area Fire Management Groups largely based on local government areas, seven Regional Bushfire Committees (one per QFES region) and a State Bushfire Committee. The plan helps QFES, its partner agencies, major landholders and communities understand how everyone works together to mitigate the risk of bushfire.

## Bushfire warning levels

QFES initiated the Shaping Future Information and Warnings Project to enhance the approach to bushfire warnings. Changes made for the 2021–22 bushfire season include adjustments to warnings language, warnings publishing platforms, action statements corresponding with warning levels and new systems to empower trained personnel to create and issue warnings locally. The new system automates a lot of the processes for sending warnings which were previously performed manually. It also enables QFES officers to send bushfire warnings relevant to their region, drawing on their local relationships and intimate knowledge of the area—saving time and making the warnings more accessible and easier to read.

QFES continues to deliver technical bushfire prone area mapping and planning advice regarding land use planning matters, meeting the department's responsibilities for the bushfire state interest under the *State Planning Policy* (July 2017). This is enabled by implementation of the QFES *Bushfire Resilient Communities* technical document (October 2019) used by local governments to inform development of planning instruments and other industry professionals during development activities.

Improvements were also made by QFES in mapping and land use planning in bushfire prone areas to encourage avoidance of vulnerable development in high-risk bushfire prone areas through:

- » a signed service agreement with the Department of State Development, Infrastructure, Local Government and Planning to provide advice on the alignment of planning instruments and amendments to the bushfire state interest policy requirements under the *State Planning Policy*.
- » the provision of technical advice to the Department of Environment and Science, the Department of Transport and Main Roads and the Quandamooka Yoolooburrabee Aboriginal Corporation on bushfire risks associated with development proposals on Minjerribah (North Stradbroke Island).
- » ongoing early engagement with local governments regarding refinement of bushfire prone area mapping for local government areas and fit-for-purpose risk assessments to inform the next generation of planning schemes.

## State disaster risk assessments

Development and finalisation of the 2021 State Disaster Risk Report and Severe Wind Hazard Assessment for Queensland due for release by 31 December 2021.

The 2021 State Disaster Risk Report is an update to the *QUEENSLAND State Natural Hazard Risk Assessment 2017*. It builds on the previous report by assessing a broader range of natural and human-induced hazards at the state and regional planning levels and includes more comprehensive information on climate change for the relevant hazards. The report was a collaborative effort led by QFES that involved 54 disaster management entities including 30 local governments and 24 other government and non-government entities.

The Severe Wind Hazard Assessment for Queensland provides a comprehensive assessment of tropical cyclone risk for Queensland. The project involved consultation with eight local governments and 35 state, commonwealth and private sector entities.

QFES also commenced work on the Severe Wind Hazard Assessment for South East Queensland in partnership with six local governments in South East Queensland, and a range of Queensland and Australian Government departments and the insurance sector, to better understand and address the risks from severe wind for South East Queensland.

## Local governments and the SES

QFES works with local governments across the state to ensure and enable SES unit and group capability. As the SES plays an integral role in supporting local governments' disaster response capability, the development of a MoU between QFES and each local government is a way to clarify the relationship.

The MoUs, developed in collaboration with several local government Disaster Management Officers and the Inspector-General Emergency Management, establish the collaborative approach between QFES and local governments for the management and support of the SES and detail responsibilities for funding and support arrangements. This ensures the delivery of an effective emergency service that contributes to a safer more resilient community.

In addition, during the reporting period:

- » thirteen local government applications were successful under the 2020–21 round of the SES Support Grant Program which contributed \$400,000 towards local government projects in support of SES facility upgrades and vehicles.
- » twenty local governments across Queensland were awarded grants in the 2021–22 round of the annual SES Support Grant Program. This funding provides more than \$586,000 towards local government projects for SES facility upgrades and vehicles. SES projects will commence from 1 July 2021.
- » QFES distributed \$1.65 million across 75 local governments with active SES units or groups as part of the SES annual local government subsidy. Funding is provided to assist local governments in defraying administrative and operational costs as a result of supporting their local SES.

In 2021–22, an additional \$1.4 million funding will provide each QFES region with \$40,000 for operational purposes and incidentals or minor repairs, along with \$30,000 for SES Trainers. With a further \$550,000 statewide for special training requirements, new or replacement defibrillators and funding to equip every SES vehicle with red and blue e-flares.



## National and international engagement—AUS-1 DART team

QFES continues to develop and maintain an internationally recognised Disaster Assistance Response capability through the AUS-1 DART team. This team is managed through FRS and includes full-time firefighters, communications officers, mechanics and ambulance paramedics, along with volunteer doctors, canine handlers and engineers, to provide an internationally deployable disaster assistance team that is classified under the United Nations. The responsibility to maintain this capability is a shared initiative by QFES and the Department of Foreign Affairs and Trade (DFAT).

QFES also continues to provide personnel for international working groups, team leaders engagements and mentor activities for the development of global rescue capability that directly increases the capabilities of the Queensland DART for response activities in Australia and abroad.

### Other key achievements include:

- » Continued implementation of *Strategy 2030* supported through the delivery of the department's strategic plan.
- » Responded to 69,899 incidents including FRS and RFS response (192 incidents per day on average):
  - 2,503 structure fires including 1,801 residential structure fires
  - 5,930 landscape fires
  - 15,315 mobile property crashes
  - 46,151 other incidents (includes other fires and explosions, rescues, hazardous conditions incidents, false alarms and good intent calls, storm and natural disaster response incidents and other situations).
- » Continued to deliver timely response times to structure fires including call taking time with 8.1 minutes at the 50th percentile and 12.8 minutes at the 90th percentile.
- » Continued to reduce the number of false/unwanted automatic fire alarms per Alarm Signalling Equipment connection from 2.2 in 2019–20 to 2.1 in 2020–21. Unwanted alarms have a negative impact on firefighters and the wider community by increasing safety concerns for fire crews and the public, disrupting the community and industry, creating complacency and imposing unnecessary costs to attend these incidents. Reducing unwanted alarm activations ensures that the department can more effectively manage priority emergency responses and resources.
- » Received 13,580 SES tasks including 2,344 Agency Support Requests.
- » SES volunteers performed approximately 146,000 operational hours and approximately 350,000 hours in preparation and training.
- » Continued to work collaboratively with all stakeholders including government agencies, industry providers and the public to provide information and education to ensure the highest level of fire safety is achieved in Queensland buildings.
- » Participated in several cultural burns with QFES officers learning from traditional owners about Indigenous cultural fire management practices. QFES' engagement with Indigenous communities included training with Indigenous fire practitioners. QFES established eight new Bushfire Safety Officer positions to be filled by First Nations peoples with the aim of ensuring traditional learnings are embedded into QFES into the future.
- » Commenced development of an Indigenous Land and Fire Management training program which will be supported with the appointment of eight Bushfire Safety Officers to be filled by First Nations peoples in 2021–22 to ensure the program meets the needs of the community. The program will support participants to develop skills and knowledge related to nationally accredited units of competency from Certificate III in Conservation and Ecosystem Management (Indigenous land management and fire).
- » Continued to develop and evaluate implementation of a remote area firefighting capability enabling appropriately trained and equipped QFES officers to undertake bushfire firefighting activities in locations where access via firefighting vehicles is restricted. The underpinning training course provides specialist firefighters instruction on how to operate in remote environments and includes remote camping, navigation, survival, communication and dry firefighting techniques. The course provides members with the knowledge and skills to plan, prepare and operate in remote or isolated environments.

- » Developed a 10-day remote rescue course enabling trained QFES officers to respond to lost, stranded or injured hikers and climbers. The course trains QFES officers to scramble across rock faces, establish anchor points in the natural environment and drill removable anchors to rescue people in danger. Each remote rescue operator carries more than 20 kilograms of equipment, food, water and spare clothing so they and the people they are rescuing are totally self-sufficient.
- » Continued to engage with the community to raise awareness about the services provided by QFES and inform the community on action for natural disasters and on improving their home and personal safety. Methods of engagement included attendance at displays, presentations and workshops at local community events across the services and state, such as the Brisbane Home Show, where QFES personnel discussed smoke alarm legislation, home fire safety and preparing homes for bushfire and storm seasons.
- » Established new and amended EML districts to commence on 1 July 2021 following the opening of new fire and rescue stations at Pimpama and Charlton and staff increases at Warwick, Dalby, Coolum, Capricorn Coast (Yeppoon Fire and Rescue Station) and Airlie Beach. EML boundary changes occurred in the Arana Hills, Bribie Island, Burpengary, Caboolture and Eatons Hill EML districts due to residential property development within the existing fire and rescue station service areas. As part of the change process, QFES engaged with local Members of Parliament, local governments for the areas, rural fire brigades and other key stakeholders. Information mail outs advising of the changes to the EML were undertaken for all affected property owners.
- » Awarded the 2020 Premier's Special Commendation Award for the department's response to the 2019–20 bushfires and COVID-19 and finalist for the Keep Communities Safe Award for the support SES members provided at the border in response to COVID-19.
- » Continued to deliver the Fight Fire Fascination (FFF) program supporting parents and guardians with their efforts to educate children and young people (three to 17 years)—who have been involved in at least one concerning fire incident—about fire safety. During the reporting period, 87 FFF enquiries were received with 12 related to Restorative Justice Conferencing under a working arrangement with the Department of Children, Youth Justice and Multicultural Affairs. At 30 June 2021, 59 FFF enquiries were completed and 28 are active. In addition, there are 48 trained FFF practitioners located throughout Queensland.
- » Continued to deliver the RAAP program with the delivery of 306 program presentations to approximately 27,700 young persons across Queensland in mainstream and non-traditional schooling systems, restorative justice programs, and in partnership with the PCYC and community youth organisations. RAAP is a practical lifesaving road safety awareness program for young drivers facilitated by operational firefighters. Delivery of the program throughout Queensland included RAAP tours to schools in regional areas such as Barcaldine, Charleville, Emerald, Gayndah, Moura, Roma and Winton. At 30 June 2021, there are 152 trained RAAP presenters located throughout Queensland.
- » Continued implementation and enhancement of the Tropical Cyclone Impact Model (TCIM) throughout the 2020–21 severe weather season. TCIM is a capability developed by Geoscience Australia in partnership with QFES and the Department of Fire and Emergency Services, Western Australia. TCIM provides operational (forecast) severe wind impact analysis to support prevention, preparedness and response to tropical cyclone events. TCIM contributes to the ongoing development and enhancement of nationally consistent, collaborative hazard and impact forecast and warning services.

# Bushfire prevention and preparedness— Operation Cool Burn

Bushfire prevention and preparedness is a shared responsibility in Queensland, primarily resting with landowners and land managers for hazard reduction. QFES is the primary agency for hazard mapping and the department leads and coordinates bushfire mitigation activities undertaken by a wide range of stakeholders. QFES is also the primary response agency for fires in Queensland.

During Operation Cool Burn (OCB), QFES supports its land management agency partners to prepare for the coming bushfire season. This includes the Department of Environment and Science (Queensland Parks and Wildlife Service (QPWS)), the Department of Resources, HQ Plantations Pty Ltd (Queensland's largest plantation forest company) and local governments as well as landholders across the state.

OCB has traditionally been a period of heightened mitigation activity generally held from the beginning of April to the end of August each year with bushfire mitigation activities focussed on high-risk areas coordinated across the state.

In 2021, QFES introduced a new methodology to better support Area Fire Management Groups to identify risks in a transparent and evidence-based way. The methodology aligns with the QERMF and is supported by new data sets of buildings and overall fuel hazard ratings. The methodology provides a framework to help Area Fire Management Groups methodically consider the various factors that affect risk and capture that local knowledge systematically.

QFES also developed and implemented several simplified geospatial survey tools using the ERSI Survey123 platform to empower rural fire brigades and bushfire mitigation partners to capture burnt area mapping and community engagement information more easily in the field with real-time reporting capabilities.

In 2021–22, the mitigation program will transition from a five-month operational period (OCB) to year-round enabling greater flexibility for land managers and owners to conduct mitigation activities in a changing climate that is leading to more protracted bushfire seasons and often limiting windows for hazard reduction burning.

The State Bushfire Committee, comprised of key bushfire partners and stakeholders, established a formal mitigation working group to support increased collaboration and information sharing between partners at a state level and support the expanded mitigation program. The Bushfire Mitigation Working Group, a sub-committee of the State Bushfire Committee, was established in the reporting period.

OCB 2020 commenced on 1 April 2020 and continued through to 31 August 2020. During this period, QFES and its key partners and stakeholders completed a total of 567 priority activities.

OCB 2021 commenced on 1 April 2021 and will continue until 31 August 2021 at which time work will commence in transitioning OCB to the year-round program of activities. OCB 2021 has a strong focus on recognising the community as a key partner, sharing messages about local bushfire risks and supporting them to prepare their families and properties.

To mitigate the risk across high-risk locations, activities include targeted community engagement to inform residents in the highest priority areas of actions they can take to better prepare for bushfires, fire break or trail works, and hazard reduction burning to reduce fuel loads.

At 30 June 2021, 98 priority activities have been completed. OCB 2021 mitigation activities are continuing in preparation for the 2021–22 bushfire season.



# Bushfire season 2020–21—Operation Quell

The 2020–21 bushfire season, known as Operation Quell (meaning to suppress or extinguish), officially commenced on 1 August 2020 and finished on 5 January 2021 with a mission to protect Queensland communities from bushfires and minimise the impacts of the bushfire season in the context of the ongoing COVID-19 pandemic.

The bushfire season was shorter than usual due to an early wet season and for the most part this was a relatively quiet operational season.

An exception to this was the K’gari (Fraser Island) fire (refer pages 47–48), which was sparked by an illegal campfire on 14 October 2020. This fire lasted two months. QFES, the QPWS and the Butchulla Aboriginal Corporation (BAC) personnel worked closely during all phases of the K’gari response to contain and extinguish the fire and preserve life, as well as protect property, culturally significant sites, historic structures and the natural flora and fauna. QFES crews assisted QPWS and the BAC in fighting the fires through both ground and air responses.

During Operation Quell, 65 aircraft, including the large air tankers, accumulated more than 3,100 flying hours and dropped more than 19 million litres of water and suppressant.

During the operational period, QFES responded more than 15,500 times to more than 4,500 fires, with personnel contributing at least 170,000 hours of time to manage the bushfires, with approximately 1.57 million hectares burnt. Importantly there was no loss of life and no dwellings destroyed.

## Event Scale—1 August 2020 – 5 January 2021

<b>4,500+ fires</b>	<b>Nil dwellings destroyed</b>
<b>1,567,626 hectares burnt</b>	<b>65 aircraft utilised</b>
<b>15,500+ responses</b>	<b>3,160 hours flown</b>
<b>2,100+ appliances</b>	<b>40 LAT drops – 400,000 litres gel and 60,000 litres retardant</b>
<b>Two Emergency Alert campaigns</b>	<b>432 Bushfire Community Warnings issued</b>

## COVID-19—planning and response— Operation Exigent

Since the beginning of the COVID-19 pandemic, QFES has played a significant role in supporting the Queensland Government's operational response through the operation of the SDCC, providing frontline support to the QPS with border control operations, planning, exercising and quarantine hotel management.

QFES' planning and response to COVID-19, known as Operation Exigent, recognises the requirement for urgent and immediate action to address the demanding, evolving and significant impacts of the pandemic.

QFES is responsible for maintaining the SDCC capability which has been stood up for a record amount of time, since 2 February 2020, in support of COVID-19 operations. QFES provides the Deputy Command role and leads the planning and logistics capabilities.

During 2020–21, QFES logistics capability supported quarantine accommodation for more than 91,000 people including international and interstate travellers, mariners, aircrew, Australian Defence Force personnel and seasonal workers.

The SDCC Planning cell has supported the development of foundational and supplementary plans that direct the whole-of-government response to COVID-19 including the State Pandemic and State Quarantine Plans and the State Mass Vaccination plan (draft). These plans are developed in consultation with disaster management stakeholders to ensure clarity in roles and responsibilities and governance and operational arrangements to keep Queenslanders safe.

The QFES SDCC Logistics and Planning team was awarded under the Commissioner's Awards for Excellence—Adaptive – Highly Commended—for continual commitment to upholding and enhancing QFES' reputation in incident and disaster management.

QFES staff and volunteers provided support at land and air borders, vaccination hubs and testing clinics. During 2020–21, QFES staff and volunteers contributed approximately 12,500 shifts to border operations.

QFES Emergency Management Coordinators within each region have worked with partners to ensure local governments and other agencies have pandemic plans in place and are trained in the disaster management arrangements and operations.

QFES has ensured continuity of service delivery across PPRR during COVID-19 and several lockdowns, with some services adapting and moving to online service delivery for training and community engagement.

# Severe weather season—Operation Erudite

Operation Erudite was declared to cover the 2020–21 severe weather season (1 November 2020 to 30 April 2021) to facilitate preparation, planning, mobilisation and response during severe weather events to support the reduction of impacts to communities.

QFES planned for the severe weather season by facilitating high-level initiatives focussed on preparation which included connecting with key disaster management stakeholders across Queensland and ensuring they were adequately informed and prepared to help protect Queenslanders.

Preparation and mitigation activities facilitated by QFES included:

- » the annual jurisdictional pre-season briefing held on 29 September 2020 in partnership with Emergency Management Australia. The briefing provided disaster management stakeholders with information on jurisdictional activities over the previous 12 months. It also highlighted important changes in the QDMA and strategic direction of the Australian Government.
- » working with Queensland Health to develop the Evacuation Management Guide for COVID-19 to support decision-makers responsible for evacuation management activities across Queensland within a COVID-19 environment.
- » a number of dual hazard exercises with the Chief Executive Officer Leadership Board, the State Disaster Coordination Group and the District Disaster Management Groups to test capacity and capability to respond to concurrent hazards such as a cyclone and COVID-19 outbreak.
- » enhancing community preparedness with the delivery of QFES *Get Ready* guides, which provide information to Queenslanders about how to prepare for their local risk.
- » enabling QDMA to enhance planning and to be prepared through the integration of the QERMF. Understanding disaster related risk through scientific and intelligence led evidence-based risk assessments, coupled with the development of data sharing initiatives, is advancing Queensland's risk-based planning in a consistent manner. This approach positions QDMA to be proactive in planning for, responding to and recovering from disaster events.

Severe weather events during this period included:

- » Far North Queensland Low Pressure System (15–16 April 2021)
- » Southern Queensland Severe Weather (20–31 March 2021)
- » Tropical Cyclone Niran and Associated Low Pressure System (25 February–3 March 2021)
- » Far North Queensland Tropical Low (24–30 January 2021)
- » Tropical Cyclone Kimi (16 January 2021) – significant event
- » Tropical Cyclone Imogen and Associated Low Pressure System (2–12 January 2021) – significant event
- » Western Queensland Thunderstorms (21–30 December 2020)
- » South East Queensland Coastal Trough (12–15 December 2020).

The day prior to the commencement of the official severe weather season, severe thunderstorms impacted much of South East Queensland (refer page 46).

Queensland's Disaster Management Arrangements were activated for a number of these events, including at local, district and state levels.

During the severe weather season, the SES completed 6,176 tasks and 1,165 requests for assistance through TAMS.

As in 2019, the severe weather season began while heightened bushfire conditions persisted in some parts of Queensland, along with the additional complication of COVID-19.

# Hailstorm—Queensland 31 October 2020

The severe weather Queensland experienced during 2020–21 is evident in the incident referred to as the Halloween Thunderstorm. Although the event is specific to 31 October 2020 it is worth noting the weather conditions preceding that date.

Widespread thunderstorms affected central and South East Queensland between 24 and 29 October 2020. Thunderstorms affected Brisbane on 24 and 25, then again on 27 and 28 October 2020, bringing heavy rainfall to some sites, flash-flooding and strong wind gusts. The thunderstorms produced large hail with reports of hail up to 6cm in diameter south of Gayndah, fallen power lines in the Caboolture area, and localised flash flooding on 28 October 2020. Severe thunderstorms impacted much of South East Queensland on the afternoon of 31 October 2020. The main impacts were giant hail up to 14cm in diameter along a path from Amberley to the northern suburbs of Logan, giant hail up to 7cm in the Gympie area, and wind damage from Redcliffe to Kingston with gusts over 100 kilometres per hour recorded around Moreton Bay. Giant hail up to 14cm in diameter was reported at Forestdale, south of Brisbane, and hail up to 13cm in diameter was reported at Hillcrest. Other reports indicated giant hail up to 9.5cm in diameter at Amberley, 8cm in diameter at Springfield, 7cm in diameter around Gatton, and 5cm in diameter at Seventeen Mile Rocks.

As parts of South East Queensland were hit by a series of very dangerous and life-threatening thunderstorms, the Bureau of Meteorology issued warnings for people in parts of Queensland's Wide Bay, Burnett, Darling Downs and Granite Belt regions. The Bureau warned the situation was volatile and continuing to change quickly. The path of damage was forecast to hit from the Queensland border to the north of the Sunshine Coast and communities further inland. The Bureau continued to issue warnings for dangerous thunderstorms throughout the afternoon and into the evening of 31 October 2020 for South East Queensland<sup>1</sup>. It was also revealed that wind gusts of 115 kilometres per hour were recorded at Cape Moreton which is located on Moreton Island, 40 kilometres off Brisbane. There were nine super cell storms in the designated warning area issued by the Bureau.

West of the city, the SDCC issued an Emergency Alert for Lockyer Valley, Ipswich, Jimboomba and Amberley residents when the severe thunderstorms were forecast to bring destructive winds and giant hail. Another Emergency Alert was issued for parts of the Gold Coast and Logan, namely Woodridge, Beenleigh, Southport and Coomera, as the dangerous storms tracked over the city.

Overall, there were approximately 296,000 lightning strikes across South East Queensland during this event, demonstrating the violent and powerful nature of the storms. Emergency services reported requests for assistance mainly relating to trees falling and damaged roofs. Three people were trapped inside a Springfield Lakes residence after a tree collapsed onto the roof. No injuries were reported.

Following the aftermath of the storm, there were approximately 95,000 homes without power and the Queensland SES received more than 2,900 requests for assistance in the Ipswich and Logan council areas. QFES crews conducted more than 2,000 damage assessments, including more than 500 instances of major damage.

QFES worked collectively with the Ipswich City Council, Local Disaster Management Group and key stakeholders to assist those community members most severely affected. A multi-service approach to recovery operations was implemented, exemplifying the effectiveness of interoperability. Invaluable assistance was also provided by the New South Wales and South Australia SES.

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<sup>1</sup> [www.abc.net.au/news/2020-10-31/qld-weather-storms-rain-hail-south-east/12821060](http://www.abc.net.au/news/2020-10-31/qld-weather-storms-rain-hail-south-east/12821060)

## K'gari fire (Fraser Island)

K'gari is the traditional land of the Butchulla people. K'gari is listed as having World Heritage values, and is located off the coast of Hervey Bay, Queensland. It is 122 kilometres long and is the largest sand island in the world. Majestic remnants of tall rainforest growing on sand and half the world's perched freshwater dune lakes are found inland from the beach. The combination of shifting sand dunes, tropical rainforests and lakes makes it an exceptional site.

In October 2020, the Bureau of Meteorology reported that mean maximum temperatures were above average in the east.<sup>1</sup> Rainfall was below average across most of Queensland for November 2020, which marked the second-warmest November on record for Queensland in terms of mean, maximum and minimum temperatures. A low to severe-intensity heatwave affected much of north-west to south-east Queensland from 15 to 17 November 2020.<sup>2</sup>

A fire was reported on 14 October 2020 in a camping area at the northern end of K'gari. The fire burned until 16 December 2020, burning approximately 85,000 hectares of bushland.

The source of the fire was determined to be an illegally lit campfire that was not properly extinguished. QPWS responded as soon as the fire was reported and assumed the role of Incident Controller. Due to dry conditions, vegetation, strong winds and inaccessible terrain, it was deemed that a direct attack on the fire was not feasible.

QFES, QPWS, the Butchulla Aboriginal Corporation (BAC), QPS, QAS and Fraser Coast Regional Council worked closely during all phases of the K'gari fire event to contain and extinguish the fire, preserve life and protect property, culturally significant sites, historic structures and the natural flora and fauna. QFES crews assisted QPWS and the BAC in responding to fires through both ground and air responses. Aerial operations commenced on 15 October 2020 with water bombing commencing on 9 November 2020.

At 0800 hours on 24 November 2020, QFES North Coast Regional Operations Centre, based in Maryborough, was activated to support QPWS' response, maintain active oversight of fire activities

on K'gari and the wider region, and coordinate with the relevant disaster management partners. QPWS established an Incident Control Centre (ICC) at its Rainbow Beach depot on 24 November 2020 with a Divisional Command Point remaining on the island. A joint Incident Management Team (IMT) consisting of members from QFES, QPWS and the BAC was established within the ICC.

The fires on K'gari, burning predominantly in inaccessible terrain, were transferred to QFES control on 27 November 2020 from the previous lead agency, QPWS. This occurred following a detailed assessment of the conditions by the agencies which included the predicted weather conditions and the threat to life and assets on the island. On 27 November 2020, the ICC moved to the Rainbow Beach Community Centre to accommodate increased IMT personnel and on 5 December 2020, the ICC relocated to QFES' Maryborough ICC, located at the QFES Complex in Howard. The QFES ICC incorporated representatives from BAC, cultural liaison officers and a number of Fire Behaviour Analysts to inform decision-making.

On 7 December 2020, the Happy Valley township on the Eastern side of the island, and three properties at Yidney Rocks were threatened by the fire. Firefighters conducted structural protection resulting in no loss of life or property. There were multiple fire fronts and significant QFES, QPWS, and BAC resources responded to these fires.

Among many others on the island, three culturally significant sites have been identified in the 'Valley of the Giants' by the Butchulla people. QFES and QPWS worked closely with the Butchulla people in protecting these sites.

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<sup>1</sup> Bureau of Meteorology Monthly Climate Summary for Queensland October 2020  
[www.bom.gov.au/climate/current/month/qld/archive/202010.summary.shtml](http://www.bom.gov.au/climate/current/month/qld/archive/202010.summary.shtml)

<sup>2</sup> Bureau of Meteorology Monthly Climate Summary for Queensland November 2020  
[www.bom.gov.au/climate/current/month/qld/archive/202011.summary.shtml](http://www.bom.gov.au/climate/current/month/qld/archive/202011.summary.shtml)

Favourable conditions and rainfall contained the fire and QFES handed back control to QPWS at midday on 13 December 2020. The below table demonstrates the scale of the event.

<b>Event Scale—14 October to 28 December 2020</b>	
<b>85,300 hectares burnt</b>	<b>30 aircraft utilised</b> (1,630 hours)
<b>367 personnel deployed</b> (including eight QPS and 13 QPWS personnel)	<b>13,306,800 litres dropped</b> (freshwater, saltwater and mixed gel additive)
<b>144 appliances</b> (671 responses and 18,979 vehicle hours)	<b>114 predictive services products issued</b>
<b>One Emergency Alert campaign</b> (1,220 text messages delivered successfully)	<b>82 Bushfire Community Warnings issued</b>

On 2 December 2020, the Premier and Minister for Trade announced a review of the event by the Inspector-General Emergency Management (refer page 74). The review focussed on effectiveness of preparedness and response to the bushfire event. The review report provides 38 recommendations for the Queensland Government. The government's response to the report supports or supports in principle the recommendations. As at 30 June 2021, QFES has implemented one recommendation and developed a series of action plans to support the implementation of the remaining recommendations within its area of responsibility.

# Marine Rescue Implementation

In 2020–21, QFES commenced work to establish an integrated marine rescue service in Queensland that will provide Marine Search and Rescue capability in support of the QPS and the Queensland boating community. The AVCGA and VMRAQ, with approximately 3,000 volunteers between them, will be encouraged to join the new marine rescue service once established.

Marine rescues are increasing particularly with more Australians holidaying domestically. On average, the AVCGA and VMRAQ complete more than 4,000 activations in a financial year.

The State Government, through QFES, provides financial support to AVCGA and VMRAQ through Service Agreements that have been in effect since 1997–98.

In 2019, the *Review into Volunteer Marine Rescue Organisations in Queensland* (Blue Water Review) was released. The review examined and identified key issues in the provision of volunteer marine search and rescue services in Queensland. In response to the Blue Water Review, QFES formed the Blue Water Review Working Group, comprised of maritime experts, representatives of the two existing volunteer marine rescue organisations and government representatives, to define a vision for the sector and a possible model for reform. A key recommendation of the working group was the establishment of a single, integrated volunteer marine rescue service in Queensland.

The MRIWG, established in February 2021, held its inaugural meeting on 2 March 2021 to start planning for the transition. The working group is comprised of volunteers from the AVCGA, representatives from VMRAQ, partner government departments and marine search and rescue experts. The MRIWG provides expert advice regarding the volunteer marine rescue sector in Queensland and assists QFES with planning and delivering the future integrated service.

The transition to an integrated service will provide an enhanced service to the boating public and enable better support for volunteers, giving them greater legal protection, administration and human resources support and seek to reduce their fundraising burden over the coming years. The volunteers will benefit from the QFES Volunteerism Strategy (refer pages 27–28) and being with an organisation with other volunteer services.

In addition, \$17.4 million has been allocated for the replacement of volunteer marine rescue vessels and the 2021–22 Service Agreements will provide an additional grant of \$10,000 per unit for essential equipment, training and facility upgrades.

Once fully established, the new volunteer marine entity will deliver a statewide marine search and rescue service which can further integrate with other emergency services, including the QPS and QAS, while ensuring greater recognition and support structures for Queensland's marine rescue volunteers.

# Exercises

QFES personnel participate in exercises to increase their competency levels in major, joint agency and small routine incidents through hands-on training.

Exercises enable testing of factors including:

- » interoperability across QFES services
- » ability to liaise with external agencies
- » appropriate response and operational procedures
- » communications plans
- » response times
- » suitability and effectiveness of equipment and PPE
- » operational preparedness.

Exercises conducted by QFES or that QFES participated in include:

- » Operation Incendium, a joint tactical exercise between the Australian Defence Force, QFES (including FRS, RFS and SES) and HQ Plantations held over three days in April 2021. The exercise tested and enhanced agencies' capabilities in managing large, complex bushfires and other disasters. It also enabled the approximately 130 participants to undertake communications, engagement and deployment in support of disaster operations. The exercise included a one-day strategic round-table discussion in the SOC about how QFES would engage the Australian Defence Force during natural disaster. Followed by two days devoted to tactical exercises including a demonstration of each agency's assets and technology and a tactical IMT exercise.
- » a major training session at Whyte Island in March 2021 to build the skills of 12 volunteer handlers and their dogs from the USAR canine squad. The squad deploys to disasters in Australia and overseas tracking scents to find missing persons under rubble. USAR dogs work in dangerous terrain, off leash and sometimes out of sight of their handler.
- » a joint exercise between emergency service agencies in the Longreach area, held in February 2021, at the Western Queensland Livestock Exchange. Members of FRS, SES, QPS and QAS worked with Western Queensland Livestock Exchange staff to familiarise themselves on the operation of cattle trucks including manually operating the trailers and identifying extraction points. This exercise enabled participants to familiarise themselves with the cattle trucks and support them in responding to incidents involving these vehicles.
- » a live evacuation field exercise, held in October 2020, designed to ensure agencies are prepared to manage evacuation centres during a pandemic. The Logan SES and South Eastern Region Emergency Management representatives joined Logan City Council, QAS, QPS, Queensland Health, NBN, Telstra, Australian Red Cross, Salvation Army and Save the Children, in the three-part exercise program. The field exercise explored different solutions to identify the best multi-agency COVID-19 safe arrangements and covered evacuation centre management, COVID-19 safety measures, sleeping and dining arrangements, short-term isolation areas for evacuees showing symptoms of COVID-19 and technology requirements.
- » a joint maritime exercise, Operation Troubled Waters, at the Port of Gladstone in September 2020. The exercise aimed to test and develop the new Gladstone Maritime Hazard Emergency Response Plan as well as strengthen interagency relationships and maintain operational skills. In the scenario, the gas detection system on a barge was activated and a propane truck driver was found unconscious with a head injury and suspected spinal injuries. More than 30 people participated in the exercise including QFES auxiliary firefighters and new recruits and officers. Participating agencies included QAS, QPS, Maritime Safety Queensland, SeaLink Queensland and Gladstone Ports Corporation. The area's new Combined Aerial Pump Appliance was also utilised for the first time during the exercise.



- » SES Exercise Evacuation 2 was a joint exercise held in June 2021 involving approximately 300 participants from QFES led by Brisbane Region SES with participants from QPS and Queensland Health including QAS. The exercise simulated the evacuation of a multi-storey aged care centre. The centre's residents had various mobility issues and ailments. The SES members responded from their depot as they would in a real event and upon arrival were tasked to support the QAS and Queensland Health under the direction of QPS. The exercise included a briefing from an aged care industry representative on the mobility and care required for elderly residents. The exercise was evaluated to identify opportunities for improvement should this situation arise.
- » the annual Gold Coast Rural Fire Brigade Group Exercise held in August 2020. Approximately 230 volunteers, 52 appliances and a helicopter participated in the exercise including 15 rural fire brigades from the Gold Coast, several brigades from surrounding areas and a strike team from the northern region of New South Wales. The training focussed on core skills such as first-aid, communications and turnover drills. Brigades also practised working with portable dams, pumps and aircraft. Managing such a large exercise also tested the capabilities of the IMT.

## Major deployments – interstate

Due to protracted or complex operations QFES may be requested to deploy officers through the National Resource Sharing Centre to participate in intrastate, interstate or international deployments as a member of a QFES Strike Team or taskforce for the purpose of an emergency.

Deployments can be an opportunity to gain personal and professional development including learnings around fire management and resourcing systems, as they often involve an integration of QFES permanent, auxiliary, civilian and volunteer staff and resources. International deployments provide an opportunity to share knowledge with fire service professionals across the globe.

Depending on the nature of the emergency, an inter-agency response may also be required.

In addition to deployed staff and volunteers, the QFES SOC has remained activated since 5 August 2019 with staff working to ensure members are mobilised and demobilised safely and efficiently.

Deployments during 2020–21 included:

### **Western Australia – April 2021**

Specialist crews from the SES travelled to Western Australia to support communities with widespread damage caused by ex-Tropical Cyclone Seroja. More than 20 SES personnel who were able to work at heights provided relief to crews and primarily undertook storm damage operations including roof repairs. The deployment was complicated by a COVID-19 outbreak in Perth. QFES successfully supported the SES crews to remain in a ‘bubble’, safely complete their mission and safely return home.

### **New South Wales – March 2021**

Approximately 170 QFES members including SES members and FRS swiftwater technicians were deployed to northern New South Wales to provide support to the flood response in Coffs Harbour, Nambucca Heads, Kempsey, Port Macquarie, Taree, Newcastle and around Western Sydney.

Duties undertaken by QFES members included making homes safe and habitable by addressing storm damage, heights work to make buildings safe, public relations, reconnaissance, intelligence gathering, tasks using floodboats including rescues and evacuations and assisting with food and medical resupplies.

## Priority area

# 4. Climate change

### 2020–2024 Strategic initiatives

- » Influence land-use planning and building standards for Queensland.
- » Consider climate change in all our decisions.

## Planning for climate change

QFES is a member of the Queensland Climate Change Inter-Departmental Committee (IDC) and is actively contributing through the IDC in the development of the Queensland Climate Action Plan (QCAP) which is focussed on positioning Queensland for stronger and sustainable climate action for the future.

In addition, QFES is a member of the Queensland Climate Resilience Councils (QCRC) program which is led by LGAQ. The QCRC provides opportunities for local governments to enhance their ability to plan for and embed climate resilience into their local level planning through climate adaptation, regional climate resilience program grants and corporate training opportunities.

During the reporting period, QFES:

- » published the *Integrating Climate Change @ QFES* report which outlines the department's response to climate change and how QFES will continue to support the *Queensland Climate Adaptation Strategy 2017–2030* and the *Emergency Management Sector Adaptation Plan for climate change*. The report articulates the department's approach to climate change and how QFES is embedding its response into its strategic management processes including strategy development, risk management and governance. *Integrating Climate Change @ QFES* also contains the key climate change actions the department is progressing. The alignment of the department's climate change response into its strategic management processes as outlined in the report will help to ensure the department continues to be agile and responsive to the impacts of climate change.
- » continued to incorporate climate projections into the QERMF to support disaster and emergency risk management across Queensland's disaster management arrangements.
- » continued to work with state government departments including the Department of Energy and Public Works, and the Department of State

Development, Infrastructure, Local Government and Planning, to look at changes to land use planning frameworks and building policy as a mechanism for reducing future climate and disaster risk.

- » continued to deliver up-to-date climate and disaster risk information in partnership with the Department of Environment and Science under the Joint Climate Change Program. This program is supporting the development of authoritative future risk information and projections through the Queensland Future Climate Dashboard.

## Building disaster resilience

QFES continued to partner with the QRA to implement the *Queensland Strategy for Disaster Resilience* (2017). The strategy aims to make Queensland the most disaster resilient state in Australia and is delivered under *Resilient Queensland 2018–2021* predominantly through the development of resilience action plans for each local government area. QFES also contributed to the Burdekin and Haughton Flood Resilience Strategy that was released in June 2021.

At the national level, QFES was a member of the working group which developed the Systemic Disaster Risk Handbook, which forms part of the Australian Disaster Resilience Handbook Collection maintained by the Australian Institute for Disaster Resilience. The handbook, expected to be published in 2021, includes principles for systemic disaster risk reduction, inclusive governance and what to consider when making decisions to support resilience and sustainability.

Disaster resilience is built by mitigating, preventing or managing disaster risk and QFES implementation of the QERMF is a key pillar of disaster resilience. This includes sharing information with the community through education campaigns, community engagement approaches and public information sharing which supports the community to prepare for, respond to and recover from disaster events.

## Priority area

# 5. Stakeholder engagement

### 2020–2024 Strategic initiatives

- » Empower our people to lead meaningful engagement with our stakeholders.
- » Connect the community, our partners and our people with skills and knowledge about emergency and disaster risk.

## Community safety advertising campaigns

Community safety advertising campaigns continued to be developed and promoted statewide to build resilience in the community enabling members of the public to better prevent, prepare for, and respond to fire and emergency events. These campaigns include:

- » Home Fire Safety: this campaign is timed around winter when there is typically a peak in the number of house fires. The campaign encourages residents to prepare their home for a quick escape, create an escape plan and practise it, and check their smoke alarms are working. The 2021 campaign runs from late May to late August with advertising on social media, radio and digital channels. Advertising links to the Home Fire Safety website ([www.qfes.qld.gov.au](http://www.qfes.qld.gov.au)) which features specific tips for parents of young children as well as older Queenslanders and their carers.
- » If It's Flooded, Forget It: this campaign targets those drivers who might be tempted to drive on flooded roads, putting themselves and potentially their rescuers at risk ([www.qfes.qld.gov.au](http://www.qfes.qld.gov.au)). The campaign launched on 1 November 2020 and ran throughout the summer wet season ending in late March 2021. The campaign featured the 'Back it Up' tagline and used television, radio, social and digital advertising.
- » Smoke alarms campaign: the 2021 campaign runs from 19 April 2021 to 18 July 2021 encouraging landlords to install interconnected, photoelectric smoke alarms in time for the 1 January 2022 compliance deadline for rental properties stipulated by legislation introduced in 2017. Advertisements are run on radio, social and digital channels, as well as YouTube and search engine marketing. The campaign also encourages owner-occupiers to begin transition to their compliance deadline of 1 January 2027. Smoke alarm information can be accessed at [www.qfes.qld.gov.au](http://www.qfes.qld.gov.au)

- » Bushfire Safety campaign: this campaign ran from late July 2020 to late October 2020 prompting residents to prepare themselves and their properties for bushfire season. Advertisements linked to a bushfire risk postcode checker ([www.qfes.qld.gov.au](http://www.qfes.qld.gov.au)) to raise awareness of widespread potential for fire and motivate residents to prepare.

## Social media

QFES continues to engage with the community and disseminate important safety messages through its social media channels. Across 2020–21, the department's Facebook posts were viewed more than 70 million times with the page reaching more than five million people. People visited QFES' Twitter account more than 180,000 times, while QFES' Instagram posts and stories reached more than 1.3 million unique users.

The community continues to use QFES' social media as a source of accurate information during times of heightened operational activity and severe weather events. Significant activity was recorded on QFES' social media platforms throughout the severe weather season. More than 190 preparedness posts were published to the QFES Facebook page between October 2020 and April 2021, these posts were collectively viewed more than 12 million times.

The number of people choosing to engage with QFES through its social media channels continues to grow. Followers of the QFES Facebook page increased to more than 473,000 followers, and followers of the QFES Instagram account increased to approximately 41,700 followers. QFES' Twitter account also experienced a steady increase to approximately 78,500 followers.

## Emergency Volunteers Advisory Forum

The Emergency Volunteers Advisory Forum met on 24 September 2020. The aim of the Forum is to strengthen the Queensland Government's commitment to engaging with emergency services volunteers and enables representatives to provide advice on issues impacting and emerging on the sector to the Minister for Police and Corrective Services and Minister for Fire and Emergency Services. Membership of the Forum consists of emergency service organisations across government and the not-for-profit sector.

Topics explored by the Forum included enhanced interoperability across the sector to support recruitment, retention and recognition of emergency service volunteers.

## International engagement and assistance—Papua New Guinea Fire Service

QFES engaged with the Papua New Guinea Fire Service (PNGFS) to donate five ex-service QFES fire appliances to PNGFS following an official request from the Chief Fire Officer, PNGFS. The nine-month project 'Operation Paia Truks' (translation—fire trucks) included the identification of suitable fire appliances for donation and refitting, planned maintenance of the appliances prior to donation and re-badging of the appliances as PNGFS vehicles.

A funding grant was provided by DFAT to facilitate the changeover of hose couplings to suit the PNGFS standards and the provision of 16 new breathing apparatus sets and 32 cylinders to complete the equipment inventory. The donation from QFES included extensive appliance inventories incorporating complete Road Crash Rescue kits, over 150 sets of ex-service structural firefighting protective clothing, over 100 sets of bushfire clothing and 100 pairs of ex-service overalls.

Transport of the appliances and the donated equipment was via the Australian Defence Force with delivery to Papua New Guinea in February 2021 by HMAS Choules.

QFES also provides approval for PNGFS personnel to access the QFES On-Line learning cache to assist PNGFS staff to gain personal and professional development opportunities. Access is requested through the PNGFS training department and external access to the outward facing learning tools is managed through the QFES Workforce Development Unit.

## Other key achievements include:

- » Contributed to national fire and emergency management policy developments and participated in coordinated decision-making through a range of national forums to implement recommendations from the *Royal Commission into National Natural Disaster Arrangements Report* (28 October 2020) collaboratively with the Australian Government and other states and territories.
- » Supported the LGAQ Disaster Management Conference in June 2021, along with other agencies such as the Office of the IGEM, QPS and QRA. The theme was *Disaster management in the new COVID world* with discussion about the importance of state and local government relationships in the disaster management sector. QFES committed support to the conference to help encourage interoperability across the sector and enhance cooperation, engagement and collaboration in disaster management arrangements.
- » Continued to deliver the Safehome program where firefighters visit households to assist in recognising and eliminating fire and safety hazards in and around the home and provide information to support people in increasing fire and general safety measures.
- » Continued the partnership with the Department of Agriculture and Fisheries and the Department of Tourism, Innovation and Sport to deliver the Shark Control Program, particularly the SharkSmart Campaign. The primary aim of the Shark Control Program is to protect people swimming and recreating at Queensland beaches from negative encounters with sharks. QFES is a member of the SharkSmart Working Group and SharkSmart Steering Committee and plays a role in linking the program up with key marine rescue organisations whilst also providing community engagement and communications input and support.

- » Entered into a Service Agreement with SLSQ in April 2020 for the provision of funds through a one-off grant of \$150,000 for the Drone Trial Program. The nine-month program was established to integrate ‘rescue drone’ operations with SLSQ’s business-as-usual activities. The program assisted SLSQ with its efforts to increase public safety on Queensland beaches, prevent drownings up and down the coast and effectively mitigate the potential risks of dangerous marine creatures including crocodiles and sharks through the use of artificial intelligence. The program also facilitated reciprocal training opportunities between QFES and SLSQ drone operators for the enhancement of emergency response capabilities. The trial program concluded on 31 January 2021 and SLSQ continues to utilise drones in its operations.
- » Installed a new live vision capability tool—the Dejero live broadcasting system—to ease the pressures on QFES producers while filming at the scene of disasters. The system consists of a transmitter that attaches to a camera and instantly sends footage, allowing high-definition video content to be received at the Emergency Services Complex in Brisbane in real time, saving hours of time and effort. The Dejero technology manages data load by using multiple cellular, Wi-Fi and ethernet signals. This is standard practice across news and broadcasting agencies globally but a first for a Queensland Government department. The technology enables the provision of enhanced, vital messaging and multimedia support to QFES, its partner agencies and the whole-of-government.
- » Designed and rolled out the volunteering capability of Field Content Operator through a pilot program to gather live intelligence and media vision from behind the frontline during activations and deployments utilising the skillset of volunteers in RFS and SES.
- » Launched the new QFES website in May 2021. The website is designed to provide quick, reliable and easy to find information. It delivers essential information in a contemporary and logical format aligning to government and industry best practice. The new website is hazard based and provides the community with faster access to the information they need in relation to hazards which impact their communities. Analytics following the website launch reflect an increase of 43.4 per cent (more than 15,000 visitors) and a significant increase in mobile access with 66 per cent of visitors using a mobile device compared to 34 per cent using desktop access.
- » Produced and covered more than 200 strategic content pieces and events for QFES, the QPS, Office of the IGEM and PSBA, successfully delivering on the terms of the department’s Service Agreement.
- » Commenced planning for the review and update of the *Queensland Prevention, Preparedness, Response and Recovery Disaster Management Guideline* (January 2018) and Support Toolkit suite (the guideline). The guideline complements the legislative responsibilities of the Commissioner (as Chief Executive) and provides guidance supporting the implementation of the *Disaster Management Act 2003* and associated legislation, and disaster management policy, plans and standards. The aim of the guideline is to provide flexible, good practice suggestions and advice to those responsible for implementing disaster management practices. Engagement with key stakeholders across Queensland’s disaster management arrangements is scheduled to commence from August 2021.
- » Renewed a one-year partnership between QFES, on behalf of SES, Energy Queensland and Powerlink Queensland—Energising Queensland SES equipment program—providing \$200,000 of crucial equipment such as chainsaws, stretchers, defibrillators, solar power blankets for recharging devices and thermal imaging equipment for distribution to more than 100 SES groups predominantly in rural and remote areas. The equipment supports the SES in providing local communities with the support needed in emergency situations.
- » Renewed a one-year agreement with Energy Queensland in June 2021 that delivers \$85,000 in sponsorship to the RFS. This partnership recognises the value of RFS and the skills and knowledge of volunteers facing emergency events. The partnership delivered an all-terrain vehicle (ATV) for a remote brigade and nine large-scale generators for use by brigades in North Coast, Northern and South East Regions.
- » Launched a new partnership for SES with Suncorp on 20 September 2020. This Principal Community Partnership will increase the social and natural hazard resilience of the Queensland community and advance SES volunteerism. It delivers a combination of valuable equipment for volunteers and resources supporting volunteers in engaging with community in preparedness for severe weather.

# Disaster management stakeholder capability development

Disaster management training, education and capability development is a key element of QFES' responsibility and commitment to Queensland disaster management stakeholders. Training for disaster management stakeholders is provided in accordance with the Queensland Disaster Management Training Framework (QDMTF). The QDMTF has been designed to meet the requirements of the *Disaster Management Act 2003* (section 16A(c)) to ensure that those with a role in disaster operations are appropriately trained.

During 2020–21, a total of 10,800 units of QDMTF training were delivered to disaster management stakeholders. Training numbers remained consistent with 2019–20 and demonstrate the department's commitment to continuity in training delivery for disaster management stakeholders in a COVID safe environment.

COVID-19 resulted in a need for eLearning modules—available to disaster management stakeholders through the Disaster Management Learning Management System. During 2020–21, 30 per cent of all training completions were undertaken through eLearning.

Reflective of their key role in disaster management, 49 per cent of the total training in 2020–21 was delivered to local government stakeholders. Importantly, local governments have continued to engage in face-to-face delivery with only 12 per cent of local government completions undertaken through eLearning.

The Operational Leadership and Crisis Management Masterclass series is a component of the QDMTF and forms a critical element of QFES' capability development program for key disaster management stakeholders.

During 2020–21, QFES offered three Masterclass sessions:

- » *Coordinating Teams Operating in Disaster Masterclass* focuses on enhancing the capability of team leaders to mobilise and manage high functioning teams to operate effectively in disaster, crisis and adversity. Due to COVID-19, 10 Masterclass sessions were delivered virtually across October to November 2020.

- » *Meteorology for Disaster Managers Masterclass* aims to provide disaster managers with expert insights into weather and weather forecasting to support their decision-making. Due to COVID-19, nine virtual Masterclass sessions were facilitated across October – November 2020.
- » *High Consequence Decision-Making Masterclass* focuses on making critical decisions in situations of uncertainty; defensible decision-making; and mitigating the impacts of uncertainty in making evidence-based decisions. Face-to-face delivery returned during the reporting period with 10 Masterclass sessions delivered in Beenleigh, Brisbane, Bundaberg, Cairns, Gympie, Mackay, Rockhampton, Roma, Toowoomba and Townsville across April – May 2021. A total of 181 disaster management stakeholders attended with 48 per cent of participants from local government.

As an alternative offering for those stakeholders who do not require the detailed level of knowledge and understanding gained through QDMTF programs, QFES launched a short awareness video, *Disaster Management in Queensland* in March 2021. The awareness video provides an overview of disaster management and outlines the functions and activities that underpin disaster management and disaster operations in Queensland.

The *Disaster Management in Queensland* awareness video along with the QDMTF and the Disaster Management Training Handbook are available at [www.disaster.qld.gov.au](http://www.disaster.qld.gov.au)

## Priority area

# 6. Strategic investment

### 2020–2024 Strategic initiatives

- » Invest in sustainable, interoperable systems, equipment and infrastructure that is integral to the delivery of our capability.
- » Operate in a financially sustainable way.

## Fiscal sustainability

The QFES *Fiscal Sustainability Strategy 2019–2023* is a five-year blueprint to support a fiscally responsible culture across the department. The fundamental principles of the strategy include good governance; leadership; stewardship; efficiency; accountability; transparency; integrity; public defensibility; and performance.

During 2020–21, progress towards embedding the strategy and its principles within the department noted key strategic outcomes delivered, including significant fraud and corruption control measures, strategic asset management and capital program tools, enhanced access to financial information and a refresh of the department's governance frameworks.

## Capital program

Significant capital works initiatives were delivered or progressed during 2020–21 including:

- » completion of:
  - new permanent fire and rescue stations at Pimpama and Yarrabilba. The Pimpama facility includes three engine bays, a training room and a ladder drill platform and the Yarrabilba facility includes two engine bays, a training room and a ladder drill platform.
  - a new permanent fire and rescue station and replacement regional QFES headquarters at Charlton. The site includes a new Regional Operations Centre and Fire Communications Centre.
  - replacement auxiliary fire and rescue stations at:
    - El Arish
    - Esk
    - Longreach
    - Wooroolin
    - Yarraman
  - a replacement QFES complex at Kilkivan
  - the Mount Isa QFES complex upgrade.

» commencing or continuing the:

- new fire and rescue stations at Caloundra South, Mount Cotton Road, Moreton Bay Central and Springfield
- replacement composite fire and rescue station at Charters Towers
- replacement auxiliary fire and rescue stations at Gracemere, Rainbow Beach and Rosewood
- replacement permanent fire and rescue station at Loganlea
- replacement QFES complex at Maleny
- replacement QFES mechanical workshop at Pinkenba
- relocation and upgrade of the auxiliary fire and rescue station at Mossman
- replacement regional QFES headquarters and auxiliary fire and rescue station at Maryborough
- upgrade of the Cairns QFES communications centre collocated with the QAS (owned and managed by QAS).

In addition, the department took delivery of fit-for-purpose replacement appliances including 23 FRS appliances and 28 RFS appliances including three Hydraulic Platform aerial appliances to support an advanced level capability in aerial firefighting and aerial rescue.



## Capability and Investment Model

The QFES Capability Framework identifies the department's capabilities, elements and associated activities within and across QFES.

The framework was expanded to align to the department's strategic objectives to inform investment into QFES' capabilities, while supporting the long-term fiscal sustainability of the department. The Capability and Investment Model was endorsed by the Strategy and Budget Committee in September 2020. The model has been adapted from the *Investment Management Standard 2017* (a guide for Victorian government departments and agencies) that has been successfully used in other states. The concepts and principles have been applied to understand the current and future needs of QFES capabilities. The model aims to scope the performance of the department's capabilities by holistically aggregating knowledge through an informed discussion with those responsible for delivering capabilities and reviewing the performance data and analytics to assess effectiveness with observations and insights from lessons management to validate performance.

The premise of the model is that all investments and priorities should originate through this integrated and contemporary planning mechanism, and that through the governance process, all planned investments are assessed, prioritised and evaluated using a consistent and transparent methodology. This will help determine where the finite resources of the department are committed.

The implementation of the steps in the Capability and Investment Model will take time to mature and the current implementation has been aimed at identifying the strategic issues associated with each capability. A number of workshops for each QFES capability have been held to identify the strategic issues with key actions identified to address those issues. A plan for the next stage to mature the model will consider a deeper review into how capabilities are delivered within regions and across services. This will enhance and improve investment into QFES capabilities and improve the level of service delivery to the people of Queensland.

### Aerial firefighting capability

QFES achieved a significant milestone with the introduction of a large water bombing aircraft to boost the department's aerial firefighting capability during 2020–21. The Dash-8-Q400AT Large Air Tanker (LAT) aircraft was provided on contract through arrangements with the National Aerial Firefighting Centre (NAFC) for the first year of a five year contract for use throughout the bushfire

season. The LAT arrived from Canada with the contract commencing on 1 September 2020. Due to the continued duration of the bushfire season, the LAT contract was extended with the aircraft released from duty on 19 December 2020.

NAFC initiated the procurement process to provide a LAT contracted service provider to QFES for the following four-year period. On 24 June 2021, the department signed a four-year contract with the successful tenderer, Field Air, who will provide a Bombardier Dash-8 Q400AT LAT (same type of aircraft as the 2020 contracted LAT). The four-year contract will be a collaboration between the Queensland and Victorian governments with a follow-on contracted period in Victoria, referred to as a 'dovetail' service. The aircraft will remain in Australia for the entire four-year period reducing the mobilisation and demobilisation costs.

The Q400AT aircraft is one of the most innovative emergency response air tankers in the world. The aircraft can drop 10,000 litres of water, gel or retardant to reinforce fire breaks or to attack the fire directly. The LAT flies at up to 670 kilometres an hour with a maximum range of approximately 1,800 kilometres. The LAT drops water mixed with retardant or gel depending on the situation. The LAT is supported by a LAT Lead Plane contracted service that performs the Air Attack Supervision duties to ensure safety of the LAT operations. Both aircraft are based in Bundaberg.

### All-terrain vehicles—RFS

The RFS has increased operational capability as a result of its continued development of the side-by-side ATVs. The RFS has supported remote brigades through the acquisition of ATVs and trailers for their transportation. Rural fire brigades and groups from across the state are able to seek approval to acquire an ATV which meets organisational standards and requirements to support operational activities. The ATV allows teams to map fires, helps enhance firefighter safety and logistical support, and assists during flood and/or other such events that may affect a community. The ATV allows for quick intelligence gathering during incidents/events. Some units are fitted with firefighting capability for flanking fires and patrolling while other ATVs are utilised in the conduct of support activities.

## Fleet management

A new digital system to track the repair and service history of the QFES fleet was rolled out. FRS members can use FleetWave to record services on appliances, making it easier for the department to manage repairs and gauge the condition of the fleet. The system has three components—FleetWave for workshop supervisors, FormsApp for fire officers and The Hub for mechanics. FleetWave makes reporting of a fault much easier and enables officers to follow it through to completion including live updates. The system also gives mechanics a clear line of sight for the faults related to trucks that need repairing enabling them to fit repairs into appliances' existing maintenance schedules. FleetWave will provide QFES with a picture of how much it costs to maintain appliances and enable the department to predict future build plans.

## Remotely Piloted Aircraft Systems (drones)

Twenty new Remotely Piloted Aircraft Systems (RPAS) (drones) were rolled out across Queensland to support frontline personnel, taking the department's drone program to more than 80 drones. QFES expanded the drone program after successfully trialling the drones in vertical rescues, land searches and joint operations with the QPS. QFES personnel use the drones to remotely retrieve vital intelligence at an incident.

Successful uses in 2020–21 include:

- » Ayr, Northern Region, SES used a thermal imaging drone at night to search for a missing man. After 16 minutes airborne, the man was located in long grass unconscious.
- » Tamborine Mountain, South Eastern Region, FRS and RFS used drone fitted with speakers to locate a man who fell down an embankment in dense bushland. The drone's pilot was able to hear the man's cries through the drone's microphone and used the drone to communicate with the man when it was overhead.
- » Callide Power Station, Central Region, RFS assisted FRS in identifying hot spots in the power station fire, which occurred in June 2021, to better inform the incident controller. The drone's pilot and observer had only 15 minutes of flying time before last light and achieved excellent imagery of the situation at the power station.

## Other key achievements include:

- » Developed a Total Asset Management Plan that aligns asset investment with QFES' current and future service delivery needs and sets out the department's asset management strategies including those centred around investment, non-investment and partnership solutions.
- » Developed five-year forward pipelines of investment for the department's fleet and built assets to further inform internal asset investment decision-making. This information also informs the Queensland Government Regional Infrastructure Plans and Forward Infrastructure Pipeline.
- » Provided seven floodboats and 11 trailers to support 18 SES groups across Queensland.

## Priority area

# 7. Knowledge

### 2020–2024 Strategic initiatives

- » Apply lessons management and assurance activities for learning and growth.
- » Support informed decision-making by sharing relevant and reliable knowledge assets.

## Community Insights Survey

A survey of more than 2,000 Queenslanders, undertaken in October 2020, provided QFES with insight into the state of their preparedness and attitude towards disasters. The department undertakes research annually with Queensland households to measure Queenslanders' level of preparedness for fire, emergency and disaster events. The survey helps the department develop community education strategies, including smoke alarm testing and legislation awareness, risk awareness and communication preferences.

Key results from the survey indicate:

- » 97.8 per cent of Queensland households have a smoke alarm installed, with 83.4 per cent of them confirmed to be operational by maintaining and/or testing them in the past 12 months. This is an increase from 97.1 per cent and 79.9 per cent respectively from the 2019 result.
- » Storms (69 per cent), pandemics (64 per cent) and heatwaves (62 per cent) are perceived as the highest risk events (slightly or very likely). These are also the events that people feel the most prepared for.
- » Awareness of the new photoelectric interconnected smoke alarm legislation has remained consistent with the 2019 result at 59 per cent.
- » The majority of Queenslanders do not have fire plans for their household (60 per cent). This number has increased since 2019 (55 per cent without a fire plan). However, significantly more people have checked the QFES or local council websites for information and advice (30 per cent) compared to 2019 (26 per cent).
- » When looking at the allocation of resources, Queenslanders would like to move towards a more flexible service (62 per cent) compared to a permanent presence in the local community (38 per cent).
- » 39 per cent of respondents had received a QFES service in the past 12 months and overall respondents were satisfied with the service received.

## Lessons Management Framework

QFES continues to mature its lessons management process through extensive post-season debriefing and reporting. As a component of operational assurance, the lessons management process, through capturing observations and learnings from the local level to state, will enable improvement of service delivery by providing an understanding of how QFES is meeting its day to day obligations, as well as providing innovative solutions to real time problems. This will also connect to the management of audits and external reviews.

To further embed the lessons management process within the department, a lessons management guide was developed. Building on the available tools and templates, QR codes were created to enable ease of capture of observations. This will create an electronic way to capture debrief information that would previously have been captured in manual forms. Each region will be provided with a unique QR code to be affixed in each QFES appliance, station, SES shed, ICC, Regional Operations Centre and area office. This will enable regions to capture and access local observations, identify local lessons and implement local solutions. This local lessons capture will enable a greater understanding of risks and issues such as safety, service delivery and assurance. A trial will be rolled out in Far Northern Region later in 2021 which will allow further consultation with peak bodies to be finalised. Regions will be provided with mentoring and coaching to develop their processes and ongoing mentoring will be provided in the analysis of observations. The mentoring will assist to uplift the capability in identifying, gathering and actioning both local and state learnings.

## Australian Fire Danger Rating System

The RFS is the lead agency for the implementation of the new Australian Fire Danger Rating System (AFDRS). The AFDRS Program is a national program intended to:

- » strengthen the ability of fire authorities to accurately communicate bushfire risk to the community
- » enhance agency readiness and preparedness
- » contribute to risk management and prevention.

In July 2021, Queensland, Western Australia and the Northern Territory will enter a testing phase designed to test parts of the AFDRS technical builds. Within Queensland, this preliminary testing is aimed to capture the bushfire season and represents an opportunity to ensure the new system is fit-for-purpose and operates as expected. Within Queensland, the following will be tested:

- » a Fuel State Editor: a centrally hosted, interactive and common tool that allows fire and land management agencies to capture field information and update maps relating to grassland fuel types, a critical component of calculating the fire danger
- » a Fire Danger Viewer: a centrally hosted, integrated data viewer for state and territory emergency services agencies to interrogate fire danger information and support effective decisions.

RFS is establishing a grassland fuel load collection network across Queensland to support the testing phase.

### Other key achievements include:

- » Continued review of portfolio legislation and progression of legislative amendments to support government outcomes.
- » Established a Fraud and Corruption Control Working Group with its first meeting held in November 2020. The working group supports the department's Fraud and Corruption Control Officer to prevent, detect and respond to fraud and corruption. The department's fraud and corruption control plan and policy were reviewed and approved. These documents outline what QFES is doing about prevention, detection and response; and avenues available to raise concerns of possible fraud or corruption within the department.

- » Established QFES research priorities to enable the department to take a forward leaning approach to drive research opportunity, capitalise on potential investment and where feasible minimise cost to QFES, and improve research alignment with strategic direction. The department's research priorities also consider those being defined by the Natural Hazards Research Australia (formerly the Bushfire and Natural Hazards and Cooperative Research Centre) and AFAC, and aligns with the Disaster Management Research Framework under the State Disaster Management Plan. QFES is also an active member of the IGEM's Research Advisory Panel which enables QFES to seek collaborative research opportunities through this forum.
- » Participated in a driverless car project, led by the Department of Transport and Main Roads, and contributed virtual reality equipment to capture data as well as participating in driving tests to inform the study. QFES' involvement in projects like this enables the department to strategically position itself to ensure these future technologies are better understood and provides early insights for future focussed decision-making.
- » Continued the work of the Knowledge Advisory Group, with representation from most QFES branches, enabling the identification of upcoming doctrine priorities, fostering networks among members and providing a distribution channel for knowledge sharing.
- » Finalised the development of a Human Rights Awareness e-learning package which was rolled out through Nexus (learning management system) to all staff and volunteers and delivered training to management on their obligations under the *Human Rights Act 2019*.
- » Continued participation in fire safety research activities with various external stakeholders aimed at increasing QFES' knowledge and understanding of innovative and emerging building products, technologies and methods of construction including fire safety research into the use of Cross Laminated Timber and the performance of, and standards pertaining to smoke alarms.

# Royal Commission into National Natural Disaster Arrangements

The Royal Commission into National Natural Disaster Arrangements was established in February 2020 in response to the extreme bushfire season of 2019–20 which resulted in loss of life, property and wildlife, and environmental destruction.

The Royal Commission's final report was tabled in the Parliament of Australia on 30 October 2020 after it examined the coordination, preparedness for, response to and recovery from disasters, improving resilience and adapting to changing climatic conditions and mitigating the impact of natural disasters. The legal framework for commonwealth involvement in responding to natural emergencies was also considered.

The report contains 80 recommendations directed at the commonwealth, state, territory and local governments and a number of other disaster support entities.

The Royal Commission's final report can be accessed at [www.royalcommission.gov.au](http://www.royalcommission.gov.au)

On 13 November 2020, the Australian Government released its response to the final report:

- » supporting 33 recommendations
- » supporting in-principle 25 recommendations
- » noting 22 recommendations directed to the states and territories.

Tasmanian, Australian Capital Territory, South Australian and Victorian Governments have released responses to the final report.

The National Federation Reform Council has identified the following implementation priorities to be progressed through the National Emergency Management Ministers' Meeting (NEMMM) prior to the 2021–22 high-risk weather season:

- » the Australian Warning System
- » the AFDRS
- » nationally consistent pre-agreed disaster recovery funding arrangements
- » a review of the path to expeditiously deliver the Public Safety Mobile Broadband
- » making substantial progress to reform fundraising laws
- » making substantial progress to improve natural disaster risk information to support decision-making such as land-use planning for new development and the construction code.

Hazard reduction data and information is also to be shared across jurisdictions to maximise its utility and value for hazard risk reduction. QFES will continue to work with partner agencies to progress the Queensland response to the NEMMM items.

At 30 June 2021, the final report is being considered by the Queensland Government to initiate actions and address recommendations. QFES will play a critical role in implementing those recommendations supported by the Queensland Government.

Commencing 2021–22, \$10.8 million is provided over four years to address Queensland's response to the relevant recommendations to enhance hazard and risk management, the fire danger rating system and emergency warning activities to support the natural disaster preparedness capabilities of Queensland communities.

*Note: The Queensland Government's response to the Royal Commission's final report was tabled in Parliament on 16 July 2021 and is available at: [www.disaster.qld.gov.au](http://www.disaster.qld.gov.au)*