

United Firefighters Union of Australia, Tasmania Branch

2018-19 Tasmanian Bushfire Review Submission

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INDEX

EXECUTIVE SUMMARY	Page 3
RECOMMENDATIONS	Page 4
INTRODUCTION	Page 5
THE IMPACT OF GLOBAL WARMING ON FIRE FREQUENCY AND MAGNITUDE	Page 6
<i>THE CAUSES, CHRONOLOGY AND RESPONSE OF THE 2018-19 BUSHFIRES IN TASMANIA ON AND FOLLOWING 28 DECEMBER 2018</i>	Page 9
EFFECTIVENESS OF STATE, REGIONAL AND LOCAL COMMAND, CONTROL AND CO-ORDINATION ARRANGEMENTS INCLUDING INTEROPERABILITY AND CO-ORDINATION	Page 11
FIREFIGHTING RESOURCES	Page 14
IMPACT AND EFFECTIVENESS OF FUEL MANAGEMENT PROGRAMS IN THE FIRE AFFECTED AREAS ON THE MANAGEMENT AND CONTAINMENT OF THE FIRES	Page 16
USE AND EFFECTIVENESS OF AVIATION	Page 16
CONCLUSION	Page 18

EXECUTIVE SUMMARY

1. This submission by the UFUA Tasmania Branch addresses the following matters subject to this review:

This paper will attempt to address the positive aspects as well as any shortcoming during the 2018 – 19 Fire Season in addition to; the response to, and lessons learnt from, recent fires in remote Tasmanian wilderness affecting the Tasmanian Wilderness World Heritage Area, with particular reference to:

- (a) the impact of global warming on fire frequency and magnitude;
 - (b) firefighting resources;
 - (c) any related matter.
2. We do not provide any full detailed assessment with regard to the following matters as the time frames for response prevented the development of research:
 - (a) The effectiveness of community messaging and warnings.
 - (b) The timeliness and effectiveness of the fire response and management strategy, including accommodating the priorities of life, property, timber production and forest asset values, and environmental and cultural values by Tasmanian fire agencies.
 - (c) Arrangements in place for requesting interstate and international assistance.
 3. The UFU acknowledges the significance of the fires that beset Tasmania in December 2018. The magnitude of these fires was an enormous drain on the TFS and supporting resources from interstate and New Zealand.
 4. There were approximately five major fires with an approximately additional 36 other fires in number at one stage. Burning land mass of approximately 200,000 hectares was burnt including 2.2% of World Heritage area being affected.
 5. The UFU submits in this summary the Tasmania Fire Service should receive additional funding for the development and establishment of two new Tactical Response & Support Stations for enhanced capability to;
 - Providing further assistance to volunteer brigades
 - Initial Attack Remote Area Team capability for wildfire in the landscape
 - Volunteer Remote Area Teams Training
 - Facilitate training for Career firefighters employed in the TFS
 - Provide an additional urgent response capacity in the event of a bushfire or emergency campaign
 - Assist BRU with Fuel reduction burns
 6. The UFU's submission is an outline of the key points it wishes to submit. Should the review committee require any further information or clarification the UFU would be happy to assist.

RECOMMENDATIONS

1. That the Tasmanian Government fully implement 2013 and 2016 Senate Recommendation to specifically address issues of compatibility and capacity to facilitate the most effective interoperability of emergency service organizations and their key personnel, especially for fire services.
2. That the Tasmanian Government commit to the development of strategies that address the consequences of climate change in the Tasmanian emergency fire management context and commit to ongoing funding to enhance those strategies.
3. That the Tasmanian government endorse the principle of increased capacity to address the consequences of climate change including an increased number of career firefighters.
4. The Tasmania Fire Commission should receive additional funding for the development and establishment of additional Career stations comprising of Tactical Response & Support capability to;
 - Providing further assistance and training to volunteer brigades
 - Facilitate training for career firefighters employed in the TFS
 - Provide an Initial Attack response capacity in the event of a bushfire or emergency campaign
 - Assist Fuel Reduction Unit
5. The Tasmanian Government commit to providing funding for additional District personal and training in Air Operations.

INTRODUCTION

1.0 On the 28TH March 2019 the Independent Operational Review of the Management of Bushfires During the 2018 – 19 Fire Season, terms of reference were presented to the United Firefighters Union of Australia - Tasmania Branch (UFUA).

1. *The causes, chronology and response of the 2018-19 bushfires in Tasmania on and following 28 December 2018.*
2. *The effectiveness of community messaging and warnings.*
3. *The timeliness and effectiveness of the fire response and management strategy, including accommodating the priorities of life, property, timber production and forest asset values, and environmental and cultural values by Tasmanian fire agencies.*
4. *The impact and effectiveness of fuel management programs in the fire affected areas on the management and containment of the fires.*
5. *The effectiveness of state, regional and local command, control and co-ordination arrangements, to include agency interoperability and the co-ordination of emergency management activities with government and NGOs.*
6. *The effectiveness of the arrangements in place for requesting and managing interstate and international assistance and the significance of interstate and international assistance in managing the fires.*
7. *The use and effectiveness of aviation firefighting resources, in particular, the suitability of aircraft types for the protection of environmental values, forest assets and the rural/urban interface in Tasmania. (Note: this should also focus on the potential effectiveness of Winch capable aircraft as a first response).*
8. *Any other matter that the Review team identifies in the course of its activities as warranting consideration.*

1.1 This is the written submission of the United Firefighters Union of Australia Tasmania Branch (UFUA) to this review in conjunction with the verbal submission that was presented by Mr Mark Dobson (President UFUA) and Mr Leigh Hills (Vice President UFUA) at a meeting with the AFAC review team on 5 April 2019.

1.2 The United Firefighters Union of Australia (UFUA) is the registered federal union for career firefighters in Australia.

1.3 The Tasmania Branch represents 362 members in Tasmania; UFUA represents career firefighters employed on a permanent full time basis and permanent part time basis.

IMPACT OF GLOBAL WARMING ON FIRE FREQUENCY AND MAGNITUDE

- 2.0** The pre significant dominate cause of the 2018-2019 wildfires can be attributed to dry lightning storms across the Tasmanian land scape, commencing on or around 28 December 2018 through to 29 January 2019. Most experts attribute these types of events to changes in the Tasmanian climate conditions.
- 2.1** Firefighters do not profess to be climate change experts or scientists, but firefighters' experiences are that the fire seasons are longer, with days of extreme temperatures resulting in more protracted and intense bushfires. In some states there are more extreme weather events including floods and storms.
- 2.2** Tasmanians are sadly only too aware of the dangers and risks of extreme fire seasons.

"Tasmania is the wettest of the Australian states, yet it still does experience long periods of below average rainfall

White et al. (2010) point out that much of the early part of the 21st century saw precipitation deficiencies in parts of the state. Further, the Department of Primary Industries Parks Water and Environment (DPIPWE, 2010) were keen to point out the increased prevalence of extreme fire weather days. The level of risk of fire on any given day is given by the Forest Fire Danger Index (FFDI), derived from weather variables air temperature, wind speed and relative humidity together with a measure of fuel availability (or dryness) called the "drought factor" (Dowdy et al., 2009). A fire weather warning is issued when the FFDI exceeds a value of 50. However the threshold was lowered in Tasmania to 24 because significant fire activity was happening at that level. ¹⁴

"The nature of emergencies faced by Australian firefighters is broadening and the number of extreme events firefighters can expect to face as a result of changing climate is expected to grow. Weather in the south of the continent is becoming drier and hotter with increased bushfire risk as well as health risks associated with extreme heat. Bushfire risk is not only increasing in most parts of Australia but bushfire seasons are becoming longer with fewer respite years. ¹²

"...while the nature of emergencies faced by Australian firefighters is broadening (Chapter 1) the number of emergencies firefighters can expect to face as a result of changing climate is also growing. Weather in the south of the continent is becoming drier and hotter with increased bushfire risk as well as health risk associated with extreme heat.

Bushfire risk is not only increasing in most parts of Australia but bushfire seasons are becoming longer with fewer respite years. More intensive rainfall periods increase the likelihood of major floods. Northern Australia is becoming wetter and while the number of tropical cyclones may decrease, the proportion of intense cyclones will increase. All coastal communities face risks associated with sea level rise and storm surges. Heatwaves will create more medical emergencies requiring first responders and drought will impact many rural communities and volunteer firefighters.

2.3 Recent research has shown that South-Eastern Australia is **one of three most fire-prone areas in the world**. For Tasmania it is predicted under a high emissions scenario up to 2100 the following will occur³:

- *A steady increase in fire danger*
- *A continuation of the trend of increasing fire danger in spring, a gradual increase in summer and little change in autumn*
- *An overall lengthening of the fire season*
- *An increase in the number of days at the highest range of fire danger at a number of locations, associated with synoptic patterns conducive to dangerous fire weather.*

And further:

"The increase in fire danger will have social and political implications, such as influencing the pace and direction of fire policy, logistics and funding; and alerting people to the need to build community resilience"

"There will be more days a year on which a total fire ban is likely to be declared on the basis of fire weather, and in spring there are likely to be more high fire danger days. This has implications for the ability to suppress fires and for using prescribed burning to minimise the risk of fire.

The regional and seasonal changes in the occurrence of high fire danger over time will require flexible planning and management throughout Tasmania."

2.4 The number and location of career firefighters will determine Tasmania's preparedness for climate change and the implications of extreme weather events.

All this is set against a backdrop of rapidly changing expectations of emergency services workers in general and firefighters in particular. The 'all-hazards-all risks' approach means they will be involved in a whole range of disasters; their 'first responder' role asks them to provide emergency medical assistance; a community resilience approach means they will take on new roles supporting community risk management strategies and community disaster committees (with which many will no doubt take a lead); they will need to be more mobile providing surge capability nationally and internationally, and; they will need to be able to operate in different jurisdictions with different organisations using different protocols and different equipment.

¹ COFFEE Report, July 2015, page 59

² NIEIR (February 2013) Firefighters and Climate Change, E.1 Changing expectations of firefighters, Page iii

³ National Environment Research Program Landscapes and Policy Hub, Fire Danger in Tasmania: the next 100 years, 2014 page 3

To do this they will need the support of government industry and the insurance industry who must be willing to provide the numbers of people, the training, the equipment and the leadership for firefighters to do the job expected of them and be able to return, like any other worker, safely to their homes and families at the end of their shift.”

2.5 Research has shown that in order to meet just the challenges of climate change, conservatively Tasmania would need to employ an additional 72 career firefighters by 2030.

FORECAST INCREASE IN FIREFIGHTERS ⁴				
	2020		2030	
	H2 ⁵	H3 ⁶	H2	H3
NSW	915	1331	1902	2993
VICTORIA	757	916	1648	2049
QUEENSLAND	1004	1004	2426	2357
SA	192	524	448	1269
WA	468	526	1109	1269
TASMANIA	16	46	16	72
ACT	101	121	252	322
AUSTRALIA	3566	4350	8095	10,024

*"Forecasting future demand and the potential shortfall of resources to deal with the impacts of climate change and extreme weather first requires understanding the current trajectory of firefighter employment....firefighters need to grow at an annual rate of between two and three percent in line with the economic cycle. This means that the number of employed firefighters (all firefighters) needs to grow approximately 50 per cent over the 20 year period between 2010 and 2030 to maintain parity with population and asset growth. In this scenario, growth is in line with expectations for state growth with WA growing at roughly twice the national average over the period and Tasmania at half the national rate."*⁷

⁴ NIEIR (February 2013) Firefighters and Climate Change, Table 1.

⁵ H2 is the High Scenario from the CSIRO climate change simulation Mark 2. The Mark 2 simulation tends to have slightly higher temperature changes for a given range. It also has generally lower monthly rain totals in most months.

⁶ H3 is the High Scenario from the CSIRO climate change simulation Mark 3. The Mark 3 model shows higher peak (heaviest) rainfall even though it shows lower rainfall in other categories. It also has higher changes in wind speed and humidity compared to the Mark 2 simulation

- 2.6** The NIEIR research is based on “conservative estimations” that predict a necessary increase of approximately 10,000 career firefighters by 2030 - or an 83% increase - in order to meet the demands of climate change and population increase.
- 2.7** For Tasmania alone that is an estimated 72 or 20% more career firefighters by 2030 – that’s ten and a half years away.
- 2.8** In 2013 the Australian Senate undertook an inquiry into “Recent trends in and preparedness for extreme weather events.”
- 2.9** The UFUA submitted the NIEIR report (Appendix 3) as part of the UFUA submission and National Secretary Peter Marshall appeared before the Committee hearing.
- 2.10** The Senate final report referenced the UFUA’s submissions:

"The National Secretary of United Firefighters Union of Australia, Mr Peter Marshall, gave some hard figures on the need for increased levels of operational staff:

The current population and climate change forecasts for operational staff needed to address increased bushfire activity would suggest a 28 to 40 per cent increase in operational staff—that is an extra 660 to 990 full-time employees—between now and 2026. This is for Victoria only. The basis for that is that we are looking at a temperature increase, from CSIRO predictions, of one to five degrees Celsius up to 2070."

- 2.11** The Senate Committee also accepted that interoperability between fire services was necessary to maximize the resources and personnel in extreme weather events:
- 2.12** The Senate Committee made the following relevant recommendation:

Recommendation 9

The committee recommends that Australian governments specifically address issues of compatibility and capacity to facilitate the most effective interoperability of emergency service organisations and their key personnel, especially for fire services.

THE CAUSES, CHRONOLOGY AND RESPONSE OF THE 2018-19 BUSHFIRES IN TASMANIA ON AND FOLLOWING 28 DECEMBER 2018

- 3.0** The Gell River fire ignited on 28 December 2018. This fire was initially attended by Parks and Wildlife. 6 January 2019 TFS first deployed its Remote Area Team (RAT) assets to the Gell River Fire after taking fire control on 4 January 19.
- 3.1** 14 January co-ordinate approach implemented for RAT capability, over two weeks after ignition.
- 3.2** 15 January 2019, second major dry lightning storms, Riveaux Road, Great Pine Tier and Lynch Hill Fires ignite. 16 January 2019 Western Hill Fire ignites.
- 3.3** 29 January 2019, third major dry lightning storm.
- 3.4** 21 January – 3 February, fire emergency at its peak, 2 major evacuation centres in operation at Huonville and Bothwell.

- 3.6** Throughout January and February up to 40 fires were at times burning throughout the State; commencing from the 28th of December 2019.
- 3.7** This was difficult time for the Tasmania Fire Service that was the lead agency in coordinating state-wide response.
- 3.8** In excess of 70 emergency warnings fires were in place that assessed as a threat to communities, environmental assets or State infrastructure at various times throughout the campaign.
- 3.9** The State Fire Operations Centre (SFOC) was stood-up.
- 3.10** Likewise, Regional Fire Operations Centres (RFOCs) were in operation across the State, and numerous multi-agency incident Management Teams (IMTs) were in force.
- 3.11** For the most part, five major complexes were the focus of firefighting efforts;
- Gell River.
 - Riveaux Road - Huon
 - Great Pine Tier – Central Highlands.
 - Lynch Hill - Zeehan
 - Western Hills.
- 3.12** Fires ignited around 28/12/19 due to approximately 1,500 dry lightning events between 28/12/18 – 15/1/19, burning approximately 200,000 hectares.
- 3.13** Around 2.2% of the world heritage area was affected.
- 3.14** Over 61 fires had been reported by the 15th of January; some taking significant time to appear.
- 3.15** Fires were considered to be threatening people and assets for 36 days from around 21st of January 2019.
- 3.16** The last Advice level fire was downgraded on the 25th of February 2019.
- 3.17** Threats to environmental values continued for the same period, Primary industry losses through loss of forest and smoke damage was significant.

⁷ NIEIR (February 2013) Firefighters and Climate Change, Page 26 (Attached as Appendix 3)

⁸ Dr. Sam Wood (5 February 2019) Fire Centre Research Hub: <https://firecentre.org.au/the-2019-tasmanian-fires-so-far-what-has-burned-and-where/>

THE EFFECTIVENESS OF STATE, REGIONAL AND LOCAL COMMAND, CONTROL AND CO-ORDINATION ARRANGEMENTS INCLUDING INTEROPERABILITY AND CO-ORDINATION OF EMERGENCY MANAGEMENT ACTIVITIES WITH GOVERNMENT AND NGO'S.

- 4.0** Approximately 1,023 interstate and international firefighter deployments occurred.
- 4.1** This includes incident management team personnel and specialist Remote Area Teams
- 4.2** A commensurate number of Tasmanian Firefighting deployments occurred from firefighting agencies (TFS, PWS and FT with SES support).
- 4.3** This does not include "normal" dispatch of Tasmania Fire Service personnel to other incidents during the period. TFS career fire stations as mentioned elsewhere in this report were maintained at operational readiness with the required crewing
- 4.4** During this campaign of approximately 56 continuous days of operations the following Tasmanian agencies were utilised:
- TFS firefighters Career and Volunteers – 1,100 pers
 - Parks and Wildlife staff and firefighters - 248
 - Sustainable Timbers Tasmania staff and firefighters – 243 (inclusive of contractors)
- 4.5** The Tasmania Fire Fighting Industry Employee Agreement 2016 regulates the minimum level of firefighters:

Clause 63 STAFFING ARRANGEMENTS and Clause 64 CREW SIZES

STAFFING ARRANGEMENTS

The total number of uniformed career personnel covered by the Award is to be no fewer than 285. In the event of unforeseen shortfalls such as resignations or retirements, Tasmania Fire Service is to take immediate steps to recruit sufficient firefighters to maintain agreed numbers.

Minimum career brigade personnel are to number 208 officers and firefighters. A minimum of 112 operational officers and firefighters, inclusive of a training crew, is to be employed in Hobart, 58 in Launceston and 38 in Burnie/Devonport.

Where stations are staffed by career personnel on a weekday-only basis, vacancies are to be filled for periods of up to 2 years by calling expressions of interest and appointing personnel on merit. If there are no expressions of interest, positions are to be filled by appointment of personnel for a reasonable period on a fair rotating basis. (1997)

CREW SIZES

The first responding crew to an incident is to consist of no fewer than one officer and three firefighters. Until an incident is deemed safe, by the officer in charge, a crew, no fewer in number than the first responding crew, is to remain in attendance.

A crew may be required to respond to an incident with more than one vehicle. (1997)

- 4.6** These provisions were negotiated in the 1990's. The UFU submits the operational numbers need to be increased in order for the TFS to properly manage training, volunteers, emergency response, scheduled leave and unplanned absences.

- 4.7** Despite several major fire events over the past eight years and three enquiries/reviews there has not been any significant increase in the number of career firefighters, despite the fact that availability of volunteers to turn out to incidents has been declining in recent years.
- 4.8** It is clear to the UFU that the current staffing numbers for all three regions have not kept pace with population growth and change in climate.
- 4.9** Insufficient firefighter numbers also impact on the ability for firefighters to maintain training and competencies. It is a false economy as a lack of firefighters results in an increase of overtime to cover for those on leave, for backfilling and training.
- 4.10** The other area for consideration with regard to staffing levels is the North West Coast of Tasmania. The TFS operates 2 x 24/7 stations in the region. One is located in Burnie and one is located in Devonport. The career firefighters at these stations comprise 1 crew per shift. i.e. 1 Officer and 3 Firefighters, (4 in total)
- 4.11** Response to any incidents in the North West region is always initially with one crew. Back up is either from Volunteer brigades or from a career crew recalled to respond after the initial alarm call. Hobart and Launceston will normally respond to similar incidents with two crews i.e. 2 officers and 6 firefighters (8 in total)

2018 – 2019 Fire Season

- 4.12** No functional role org chart, who has functional responsibility of which capabilities. TFS need to develop an org chart that defines reporting lines, authority and budget delegations as a matter of priority, this was outlined in the 2016 review, recommendation 1.
- 4.13** Numerous duplications at the IMT, ROC, SOC level create greater confusion and inefficiencies.
- 4.14** During the 2018-19 bush fires, firefighters were continually expected to undertake Operational roles I: E Div. Comm, Sector Comm, Operations that they had not been provided formal training and/or hold the appropriate qualifications for. UFUA has been informed by its members that mentoring opportunities were only offered after day 50 of the emergency.
- 4.15** Leading up to the fire season of 2018 there had been little formal training conducted to increase capacity in the operational arm within the IMT and RFOC.
- 4.16** Experienced Operational officers have been absorbed into air operations and the IMT therefore reducing our capacity for Divisional Commanders and Sector Commanders. The framework being used may be too big for Tasmania. Once IMT, RFOC, SFOC roles are filled there are no personnel left for the area of operations on the fire ground.
- 4.17** IMTs create plans or override fire ground planning based on misinformation. IMTs insist on sending resources when they have been told they are not required, vice versa when they are requested they are not sent. A plan is not a plan until it has been ground proofed and verified as being achievable or worthwhile.
- 4.18** UFUA recommends implementing a planning approval system that includes fire ground validation. This should include operational priorities as often there is not critical alignment between the IMT and ground crews.

- 4.19** It is not clear where the Remote Area Team (RAT) sits in the command and control, at times leading to confusion relating to tasking, does this capability fit at a Brigade, Region or State level?. Clear lines of command and control need to be established for RAT.
- 4.20** District Officers and District Station Officers were also drawn out of their district to undertake roles in the RFOC or IMT, this lead to a loss of local knowledge as to capacity/ability of volunteer brigades as the permanent district officer knowledge of the land scape and capacity of volunteer brigades. This caused a breakdown in communications to the extent that volunteer brigades weren't used to their ultimate capacity as the knowledge of knowing who was available when was lost.
- 4.21** Personal expected to work at levels above their training and experience, no consideration from management regarding the consequences of an accident in the workplace. Examples of this was Station Officers tasked to be Divisional Commanders overnight, the role they were fulfilling was actually I/C for a level 3 Incident as all IMT had closed down.
- 4.22** Multiple Leading Firefighters and senior firefighters were being deployed as Sector Commanders which therefore created vacancies on shift. Senior firefighters are not qualified as sector commanders. Many leading firefighters also do not have this qualification
- 4.23** There were instances of communication break downs between the SFOC and RFOC as well as IMT and fire ground operations.
- 4.24** Lack of understanding in relation to the operational side of the incident, in particular tasking and timeframes that are unrealistic, and knowledge around the environment that firefighters were working in.
- 4.25** There is no clear system in place to monitor fatigue management for firefighters or Contractors, this requires review of processes and policies.
- 4.26** Additional human resources are required to ensure additional contractors are inducted during a fire incident, to ensure they attend contractor induction workshop, present insurances and competency certificates. This will alleviate situations of potentially engaging contractors that do not have the appropriate skill sets such as placing in fire breaks.
- 4.27** Not all Tasmanian Government agencies have the same Hazard/Accident reporting systems, STT have a different system of processing reports. Agencies that operate together need to look at aligning these reporting systems.
- 4.28** Lack of equipment, Personnel arriving from interstate didn't have the required equipment to go firefighting, TFS unable to supply them. It is an expensive exercise to bring firefighters from Interstate or internationally and not have them working on the fire ground.

FIREFIGHTING RESOURCES

- 5.0** The TFS predominately provides an urban response capacity through both career and volunteer firefighters.
- 5.1** Career firefighters are employed at career brigades each comprising a minimum response crew of 1 officer and 3 firefighters and are located in stations as set out below;
- Burnie
 - Devonport
 - Launceston x 2 crews
 - Rocherlea
 - Bridgewater
 - Clarence
 - Glenorchy
 - Hobart x 2 crews
 - Rokeby x a day crew employed Monday to Friday
- 5.2** The TFS has approximately 230 Volunteer stations around Tasmania.
- 5.3** Response capacity for volunteer firefighters will vary depending on the location, availability due to regular employment, other commitments and size of the Volunteer crew. Training of Volunteers is also an issue within the TFS given the limited people resources allocated by the TFS to support Volunteer brigades state-wide.
- 5.4** Training of Volunteers is also an issue within the TFS given the limited people resources allocated by the TFS to support Volunteer brigades state-wide.
- 5.5** Some response disciplines are difficult for Volunteer firefighters to undertake given the intensity of training required.
- 5.6** Career firefighter's respond to the following incidents as part of their role in the TFS:
- Emergency response and suppression of all types of fires;
 - Marine and aviation response;
 - Urban search and rescue;
 - Vertical rescue;
 - Hazmat incidents;
 - Road crash rescue;

- Community fire education and training;
- Fire equipment sales and service;
- Fire alarm monitoring; and
- Fire investigation

5.7 TFS report that there are five thousand Volunteer firefighters. The reality is that this number is grossly inflated and the real figure may be as low as 1500 volunteers that are trained and available respond to emergencies. Volunteers do not respond to all incidents types as set out for career firefighters.

5.8 When a major bushfire incident breaks out any TFS response of personnel is in addition to response capacity as set out above. The TFS does not have extra firefighters available in standby or any other capacity to respond to major incidents such as the bushfires of December 2018. The TFS must organise additional response of staff from within the TFS whilst simultaneously maintaining an urban response capacity.

5.9 No direct budget relating to the RAT and therefore unable to manage training, equipment procurement and/or maintenance. TFS need to develop a budget centre assign the authority and provide a delegation of expenditure to a RAT coordinator in order to manage the capability.

The State Fire Commission should have allocated specific, additionally funded resources to conduct the following

- Assist with Fuel reduction burns
- Providing further assistance and training to volunteer brigades
- Facilitate training for career firefighters employed in the TFS
- Provide an Initial Attack response capacity in the event of a bushfire or emergency campaign
- Provide additional personnel for enhanced regional Air Attack Operations
- Winch Operator capability

The fire service does not have a stand-alone response capacity for long duration emergencies other than normal day to day incidents. TFS is primarily established around professional firefighters manning a 24/7 response in urban stations. However there is an expectation from the community that TFS provide a round the clock firefighting service in all parts of Tasmania. .

IMPACT AND EFFECTIVENESS OF FUEL MANAGEMENT PROGRAMS IN THE FIRE AFFECTED AREAS ON THE MANAGEMENT AND CONTAINMENT OF THE FIRES

- 6.0** Accessibility, terrain and the status of World Heritage Area's does not allow for effective fuel management in locations such as Gell River.
- 6.1** Fuel reduction burns throughout 2018 were not conducted throughout the 2018 -2019 major fire locations with the exception of Mt Heemskerk on the states West coast, this reduction burn slowed fires up in that area considerably on the western side of the Lynch Hill fire.
- 6.2** There are currently very few Sustainable Timbers Tasmania (STT), formally Forestry Tasmania (FT) permanent field based positions for employees who were required as part of their duties to participate in fuel reduction burns and fire suppression.
- 6.3** It is clear from the detail provided by the AWU that frontline firefighting suppression capacity in Tasmania has diminished as a result of job losses in FT.
- 6.4** There are currently very few STT or Parks and Wildlife permanent field based positions for employees who were required as part of their duties to participate in fuel reduction burns and fire suppression in STT tenure.
- 6.5** Although TFS received funding for the creation and enhancement of the Fuel Reduction Unit (FRU), this unit is may require volunteer availability and support to conduct burns in some areas. FRU would be more effective if it was able to draw on career firefighters through the establishment of regional Career Tactical Response & Support Stations. Personal at these stations could assist FRU with planned burns outside of the fire season and for fill the role of dedicated RAT teams during the fire season.
- 6.6** The consequence of the market shift in resources available means that further pressure will be placed on TFS Career and Volunteer firefighters should a bushfire occur. This is unacceptable. Volunteer firefighters are very valuable asset to the Tasmanian Community. They selflessly give their time to support their community by volunteering for the very dangerous job of firefighting.

USE AND EFFECTIVENESS OF AVIATION

- 7.0** Also at the peak of the firefighting effort approximately 40 aircraft were in use daily, operating out of seven air bases.
- 7.1** This included a variety of helicopters and fixed wing aircraft (such as the air tractors with a 3200L capacity to the C130s with 13000L capacity) and used for water bombing, firefighter transport and aerial observation.
- 7.2** Not all aircraft had compatible communication systems an example of this was the Black Hawk helicopter deployment.
- 7.3** Over the last weeks of the campaign there was a steady decline in aircraft needs with fewer aircraft actively deployed.

- 7.4** Base camps utilising interstate resources were established, with the main base camp located in the Derwent Valley.
- 7.5** TFS currently lacks the capacity, skills and personal to operate regional airbases to meet the weight of attack to control and contain fires for a continuous period of operations without depleting resources in other areas. There were numerous instances when unqualified persons were asked to undertake roles associated with air operations
- 7.6** TFS personal are not qualified in Winch Operations. TFS are currently reliant on bring in specialist trained personal from other jurisdictions that do not understand landscape or have local knowledge.
- 7.7** TFS personal need to be fully trained right the way through as they know and understand TFS policy and procedure.
- 7.8** The use of personal who were not fully trained and or from other jurisdictions lead to pilot confusion due to the fact that they were utilizing differing procedures.
- 7.9** Use of the Fire Boss was effective throughout the campaign. C130 use in Tasmanian Wildness area's and landscape is questionable as they are not fit for purpose and costly, these air craft require the fire ground to be cleared prior to drop. C130 ultimate capability and use would be in open plain areas.
- 7.10** Additional funding of approximately \$150,000 annually would be required for:
- Air Attack supervisors are required to provide tactical direction to the water bombing aircraft.
 - Air Observers to report of the fire activity and the success of suppression and what the fire is doing now and into the next operational phase.
 - Aircraft Officers are required to manage the strategic and tactical phases of operations.
 - Air Operations Managers to work within the region and manage regional fire suppression.
 - Air Base Managers required to safely manage the operating base to ensure the operations is safe efficient and effective.
 - Air Base support personnel required to assist with the tracking of aircraft, loading, unloading and resupply of the aircraft.
 - Aircraft radio operators whom are required to work within the airbase and need to communicate directly with the air attack supervisors and or pilots.
 - Specialist aircraft mapping personnel.
 - Aerial incendiary supervisors and operators.
- 7.11** Air base and Staging Area Emergency Procedures needs to be developed to ensure these temporary areas comply with Work Health and Safety Regulations.
- 7.12** Personnel undertaking aircraft related roles i.e. hover, sling loading etc. without having completed any training. This happens season after season as the organisation either can't or won't ensure personnel are fire ground ready.
- 7.13** Implement the training program which has previously been submitted to TFS on a number of occasions.

- 7.14** Use aircraft to transport fire crews to reduce travel times for crews to and from the fire ground. Some occasions crews spent 6 hours travelling per day. When aircraft were travelling to the same destination empty in 20min.
- 7.15** Aircraft are being sent to fires in an Initial Attack capacity but there is no combined capability to deploy ground resources to support that initial aerial suppression work. Implement an Initial Attack program as outlined in the briefing paper 'Fire Crews Evolving the TFS Wildfire Response Capability' dated and submitted to TFS July 2017.
- 7.16** No scenario specific aircraft accident response plan. An aircraft crash involving a full 214B would see 10 Pax plus aircrew relying on a response from the Westpac Helicopter for rescue. The Westpac Helicopter does not carry extrication equipment and cannot transport numerous casualties. Last Westpac response to the fire ground took 1hr 50min to the Broad River in 2013.
- 7.17** There is a requirement to implement a crash response procedure in-line with the IHOG action guide.

CONCLUSION

- 8.0** Recent research has shown that South-Eastern Australia is one of three most fire-prone areas in the world.
- a. Although there were some communication and command issues, that fact that firefighting efforts resulted in minimal loss or damage to property and no loss of life is a great result to what could have been a devastating event to the Tasmanian community.
 - b. Research has shown that conservatively Tasmania needs an increase of 72 career firefighters by 2030 as a result of the challenges of climate change.
 - c. The Australian Senate has considered similar issues but on an Australia –wide scale as this committee is considering and referenced the UFUA’s submissions and research on the capacity and capabilities of fire services to meet the challenges of extreme weather events.
 - d. The January 2016 Tasmania fires demonstrated the need for increase in resourcing to meet the challenges one of the three-most fire prone areas in the world is facing. These are long campaigns with vast areas burning and at stake.
 - e. The TFS has approximately 230 Volunteer stations around Tasmania. Response capacity for volunteer firefighters will vary depending on the location availability and size of the Volunteer crew. Training of Volunteers is also an issue within the TFS given the limited people resources allocated by the TFS to support Volunteer brigades state-wide.
 - f. When a major bushfire incident breaks out any TFS response of personnel is in addition to volunteer response capacity. The TFS does not have extra firefighters available in standby or any other capacity to respond to major incidents such as the bushfires of December 2018. As the lead agency for major fire events, TFS must organise additional response of staff from within

the TFS whilst simultaneously maintaining an urban response capacity.

- g. Clearly the current resourcing model is inadequate and requires immediate review. We respectfully submit that the Tasmanian, NGO's and Federal Governments commit to the development of strategies that address the consequences of climate change in the Tasmanian emergency fire management context and commit to ongoing funds for those strategies and endorse the principle of increased capacity to address the consequences of climate change including an increased number of TFS career firefighters and capability.

