Dear Sir/Madam,

Submission to the Cronstedt Review of the Management of Bushfires during the 2018-19 Tasmanian Fire Season

Thank you for the opportunity for the Tasmanian National Parks Association (TNPA) to meet with the AFAC team on 4th April 2019. This submission supplements the views expressed verbally at that time.

You will recall, our verbal presentation noted a number of concerns we have regarding some topics listed in the AFAC Review’s Terms of Reference. We see no need to repeat these again in detail here but remind you our concerns encompassed issues of the response to some of the fires (particularly the initial response to the Gell River fire in early January), the adequacy of fire-fighting resources, and prioritisation of available resources (particularly regarding the protection of irreplaceable areas of palaeo-endemic flora).

The attached document was prepared by us to inform our members and supporters on the impact of the fires but it also contains a number of observations and comment we consider relevant to the AFAC Review. In particular, we draw your attention to the concluding ‘comment’ section in our attached document. There is an urgent need for a broad facilitated community dialogue on this crucial issue to frame any future actions and any recommendations as to how to progress this would be welcome.

Yours sincerely,

Nicholas Sawyer
President, TNPA
Summary of 2018-19 Tasmanian fire season
Updated 13\textsuperscript{th} April 2019

Aerial view of burnt ridges above Huon River, Arthur Range beyond, Tasmanian Wilderness World Heritage Area.
Photo: Grant Dixon

It would be difficult for anyone in Tasmania to have escaped knowledge of the extensive bushfires that have burnt throughout Tasmania during the past summer. Fires burnt for more than five weeks throughout a record-breaking dry January. The situation eased somewhat with a week of westerly rain and showers from 8\textsuperscript{th} Feb, although fires remained active in a number of areas. Even by early April, with the edges of the Gell River and Riveaux Road fires in the southwest considered secure by the Tasmanian Fire Service (TFS) some hot spots remained to be patrolled.

Most of the Southwest National Park and the southern part of the Franklin-Gordon Wild Rivers National Park were closed to public access for much of the summer, and parts remain so until the impact on infrastructure and access can be assessed.

We previously described the evolving fire situation in late January. This document reflects on the situation as the fire season ends.
Some quotes of the 2018-19 fire season

10th January, Mercury newspaper

In a letter to Emergency Service Minister Michael Ferguson, on 8th January, the United Firefighters Union (UFU) noted they had proposed a trial of an initial fire attack response prior to the current fire season. Vice-president Leigh Hills also supported calls for a summit to discuss a range of issues, noting, “we’re not as prepared as what we could be, and initial attack is a basic example of that, to be able to get on top of a fire earlier”.

Greens Senator Nick McKim observed that, “the UFU proposal was comprehensive and cost-neutral, and it beggars belief it was not accepted at least for a trial.”

Minister for Emergency Services Michael Ferguson deflected any criticism by referring to “armchair critics” and commenting that “we see this opportunism from the Greens each fire season ...”

31st January, Mercury newspaper

In the light of what was referred to as a potential “environmental catastrophe” (ABC) and calls by Nature Photographers Tasmania and the Wilderness Society Tasmania (30th January) for an “urgent request (for) international amphibious water-bombing assistance to combat the unfolding tragedy at some of the world’s most important and iconic natural sites, in the Tasmanian Wilderness World Heritage Area”, the following comments made it clear where priorities lie:

PWS General Manager Jason Jacobi noted his agency’s request for large aircraft to drop retardant in threatened areas had “(proven) to be a challenge” because resources were so stretched.

But Tasmania Fire Service (TFS) Chief Officer Chris Arnol stated “there was no need to request (further) resources outside Tasmania”.

6th April, Mercury newspaper

Seemingly contrary to the above, TFS Chief Officer Chris Arnol later said “the remote area firefighting is the ... where we ran out of capacity.” He acknowledged that without the help of some 1000 interstate and NZ personnel “we wouldn’t have been able to tackle them all (the fires) simultaneously ... we would have had to just prioritise them.” "We did leave some fires that weren’t going to do any harm ... we just left them because they were burning on the West Coast in button grass. “We don’t want to be in a position where it’s one or the other, because you lose an asset.” But “the fire service would continue to weigh up whether sending personnel into Tasmania’s rugged, remote and dangerous terrain was even the right tactic.”

1st February, Mercury newspaper

PWS spokesperson Ashley Rushton claimed success at protecting wilderness values; “we have been doing natural value asset protections that have been very, very successful”. At the time, approximately 180,000 ha and counting had been burnt, about half within the Tasmanian Wilderness World Heritage Area (TWWHA).

The extent of areas burnt by the 2018-19 wildfires and impact on natural values

According to the Tasmanian Fire Service (TFS) mapping, the total burnt area is some 205,000 ha. Hardly any cleared agricultural land was burned, it was predominantly native vegetation and some forestry plantations, illustrated by this map. This was the largest land area burnt since the devastating Black Tuesday fires in 1967 and comprises 3.2% of the state’s total mainland area. Almost half of this (about 93,000 ha) is within the TWWHA. This comprises 5.9% of the TWWHA. (And remember that 45,000 ha also burnt in 2013, and then there were the 2016 fires, so about 10% of the TWWHA has been burnt in 6 years.)
Here is a first attempt at analysing what has been burnt, by the University of Tasmania’s Fire Centre Research Hub. The bland statistics downplay the real-world impact; they note that “only 3.2%” of the area burnt is rainforest but this is still some 6000 ha that will likely take many centuries to recover. And alpine country is not distinguished in the vegetation community classification used but is known to have been burnt in some areas (Crest Range, Denison Range, Central Plateau) and possibly others (Schnells Ridge, Eastern and Western Arthurs); see below. And there is inevitable heterogeneity even within areas mapped as vegetation communities “resilient to fire”, with the landscape including copses and corridors of more sensitive vegetation. Furthermore, some areas were also burnt in the 2007 wildfires so incremental loss of organic soil (peat) in these areas, and on better-drained slopes, is likely.

On the basis of our own analysis undertaken in mid February, using TFS and other public data, the vegetation considered “extreme” or “very high” fire sensitivity\(^1\) comprises just over 3% of the total statewide burned area. This doesn’t sound like much but is potentially pretty significant given the large total area burnt. The following maps illustrate the area burnt in the Denison Range - Vale of Rasselas and Huon - Cracroft valley areas, just two of the 2018-19 fire grounds largely within the TWWHA. Within these areas the fires have obviously burned with varying intensities so the extent of short and long term damage remains uncertain.

\(^1\) Tasmanian vegetation communities have been classified based on flammability, and fire sensitivity (see Table 1 here). Extreme fire sensitivity includes King Billy, Pencil Pine, Morrisby’s Gum, Spinning Gum, Huon Pine, Fagus, and silviculture plantations. Very High fire sensitivity includes quite a few more mixed vegetation types (see Table 1 in the publication linked above for exactly what these are). They include various alpine heathland and moorland communities, alpine rainforest and woodland, and wet Eucalypt forest types.
Riveaux Road (Huon – Cracroft valley) fire showing burnt vegetation types, EXTREME fire sensitivity in red, VERY HIGH fire sensitivity in turquoise, silviculture plantations (listed as EXTREME fire sensitivity) highlighted in yellow.

Media-reported commentary by PWS and others often seemed to downplay the potential or actual impacts of the fires on natural values. Reporting of the natural values at risk was largely down to groups like ourselves, Nature Photographers Tasmania and the Wilderness Society Tasmania; for example, see here and here.

Maps prepared by PWS on 15th February and made available to stakeholders like ourselves somewhat later indicated that some 479 ha of “fire sensitive threatened” vegetation communities had been impacted by the fire at that time. But threatened is used here in a strict biodiversity conservation sense and the somewhat reductionist approach therefore does not include widespread fire sensitive communities like alpine heathland or some rainforest types. The mapping also indicated that some 16,800 ha of “old growth forest” had been impacted in some way. Preliminary fire severity mapping indicated 7,061 ha of *Eucalyptus regnans* forest (677 ha in the TWWHA) had been impacted, with an overall 25% of this considered impacted at high or very high severity. More detailed fire severity mapping has not yet been reported) and will be required before the overall damage is clear.

In Parliamentary questioning following his State of the State address in late March, the Premier and Parks’ Minister finally acknowledged the extent of damage to the TWWHA, noting that 6% of its area had been burnt and that 16% of this was not “fire adapted” and, by implication, unlikely to recover.
A picture can tell a 1000 words ...

The above maps and statistics provide a somewhat abstract representation of the areas burnt whereas photographic imagery can bring home what is really at stake. The following aerial images, and the introductory one above, were captured on 23rd February 2019.

*Burnt tongues on the slopes of Mt Bobs, above the South Crocrot Valley. Photo: Rob Blakers*

*Burnt rainforest at the forest edge on the slopes of Mt Bobs. Photo: Grant Dixon*
Burnt alpine vegetation on the Crest Range, Mt Bobs beyond. Photo: Grant Dixon

Burnt forest in the Strike Ridge area, Cracroft Valley and Mt Bobs beyond. Photo: Grant Dixon
The bigger picture – climate change

Some more to reflect on …

Academic commentators have noted that “dry lightning has set Tasmania ablaze and climate change makes it more likely to happen again”. There is more on this topic here. Former Australian fire chiefs fear Australia is unprepared for this escalating climate threat.

And writer Richard Flanagan provides another, eloquently argued, perspective on the then-current situation, not just in Tasmania but globally, here.

Some observations

The previous near-disastrous fires in the TWWHA occurred in 2016 and several inquiries resulted; for example, see here. A range of recommendations were made but arguably have not been effectively implemented (for example, increased remote area fire fighting capacity).

There has been criticism of the lack of an effective early response to the Gell River (Denison Range – Vale of Rasselas) fire in particular, which commenced at the end of December and was the only fire burning until the multiple dry lightning strikes on 15th January. It subsequently became a major part of the TWWHA conflagration.

Furthermore, some have argued that priorities were misguided and resources inadequate for remote suppression, and that the incremental rather than catastrophic losses to natural values this year was due to good luck not good management.

The fires this summer have also highlighted another fire management related issue, that of fuel reduction burning (or other management burning). In some areas (e.g. southern Arthur Plains – Cracroft valley area) the fires this summer have re-burnt areas that have had wildfires in the last few to c. 40 years. The conventional wisdom used to be that, even if it does not stop the spread of fire, recent burning reduces fire intensity and/or slows its progress, but one now has to question how useful management burning is – especially when one looks at the impacts on the natural environment? It seems that it might not be that effective in modern Tasmanian conditions, or be required so often as to be incompatible with natural values conservation.

There seems little doubt that Tasmania needs more remote area fire-fighting capacity but this would not change the more fundamental question of prioritisation; the day-to-day and hour-by-hour decisions on the deployment of finite fire-fighting resources. Crucially, there was no imminent threat to Hobart or other major population centre throughout the recent fire season. If there had been, it is unrealistic to think that it would not have become a top priority, it would have attracted all available resources, not just from remote area fires but the protection of rural properties would probably have been abandoned too.

Nevertheless, in the light of recent experiences (not just 2018-19, but also 2016), we need to review how natural values are prioritised for fire-fighting resources when life and property, or timber plantations, are considered to be threatened, and the cumulative impact of the loss of Gondwanan and other fire sensitive vegetation over multiple fire seasons.

Both the Tasmanian Greens, the state ALP and unions have called for an independent review into the bushfire response, including resourcing levels and the extent of fuel-reduction burns, but the Liberal government has merely accused them of looking for cheap political points.

During the fire season the TFS apparently requested the Australasian Fire and Emergency Services Authorities Council for a peer review of the summer’s events and this has turned into the Cronstedt Review of the Management of Bushfires During the 2018-19 Fire Season, taking public submissions during April 2019. It is to examine the causes, chronology and response to the 2018-19 bushfires in Tasmania and inquire into the timeliness of the response to fires and the impacts and effectiveness of strategies, programs, resourcing.
Comment

There are also far broader questions that should be debated and addressed regarding what we are trying to protect and why, what is practical, and the fact that fire seasons like 2018-19 may well be the new norm, or at least far more common.

Climate change is upon us. Longer, hotter, drier summers with more frequent dry lightning strikes are the new normal and conditions are likely to get worse. Even in the unlikely event that the world’s leaders get their act together and stabilise atmospheric greenhouse gases at something close to present levels, the climate will not return to that of recent centuries in the lifetime of anyone alive today.

Our highly valued Gondwanan relic vegetation are remnants of a different climatic era. The relatively small isolated areas that remain have survived recent millennia because they are in locations that have provided a degree of natural protection from wildfire. And clearly they can survive occasional droughts or they would have perished long ago. But this equilibrium between climate and ecosystem has been broken by recent and continuing changes to the climate.

This requires us to rethink our response to fire. Is it even desirable, let alone practical, to attempt to suppress all fires? But, if we leave “nature” to take its course, most of the TWWHA could comprise recently burned scrub within a few decades, if not sooner (just because we “dodged a bullet” this summer [and in 2016] does not mean that we will be so lucky next time – marginally more severe conditions or slightly different timing could easily have resulted in far greater impacts). Much of Tasmania’s most iconic native vegetation is highly sensitive to fire and mostly located in wilderness settings. Its protection will involve increased intervention in wilderness; something which has been strongly opposed in other contexts. How much intervention can be justified: “management” burns; on-ground firefighters; sprinklers; aerial water-bombing; drops of fire-retardant (with implications for nearby ecology); bulldozing of firebreaks? Should we prioritise a few of our most highly valued areas (e.g. the Gondwanan vegetation of the Northeast Ridge of Mount Anne, Mount Bobs or the pencil pine forests in the Walls of Jerusalem) ahead of everywhere else, bearing in mind that there will be circumstances when the protection of any specific location may be impossible? And is there any point, if all that can be achieved is to postpone the inevitable?

There is no simple, obvious answer, but these questions are fundamental to any consideration of how we deal with fire in the future. The sooner we start thinking about them, the better.