

NSW BUSHFIRE INQUIRY 2020 - SUBMISSION

With regard to the Terms of Reference Point 2 (current laws) and Point 5 (Preparation and planning for future bushfire threats and risks), the following concerns are raised regarding the RFS 10/50 Clearing Code which was enacted in accordance with the Rural Fires Act 1997 legislation:

- The ongoing loss of trees in RFS 10/50 Clearing Code entitlement areas in many instances appears to have little to do with bushfire risk or hazard reduction. In Hornsby Shire alone there are 5,000 mature trees removed every year (statistics below from [REDACTED], [REDACTED] [REDACTED]). Their removal is often followed promptly by a development application.



Pennant Hills District Civic Trust Inc

14 May at 08:54 · 🌐

15000 trees are lost annually in Hornsby Shire

1/3 due to development

1/3 due to natural loss

1/3 due to 10/50 rule

The urbanised areas of our shire has 36% canopy cover. If this tree loss trend continues we'd have no canopy left in 30 years.

[REDACTED]

Many of these 5,000 trees are not only mature but some are remnant trees well over 100 years old (photos below). If they are not in a heritage conservation area but are in a vegetation zone, or even a buffer zone, many have no protection. In Hornsby Shire the Council does not have a separate heritage list of Significant Trees. It is beyond the resource capabilities of local Councils to expend vast amounts of time and money surveying every significant tree in their Shire simply to protect its remnant tree canopy from the self-assessment of property owners.

The irreplaceable loss of these trees is an entirely foreseeable consequence of the self-assessment criteria of the RFS 10/50 Clearing Code which needs to be rectified.





- The Code has caused significant unintended consequences including impacts from reduced tree canopy cover. There is:
 - an increase in the heat island effect particularly in the flat areas of the western suburbs of Sydney;
 - a significant loss of wildlife habitat in the more established northern suburbs of Sydney;
 - a loss of connectivity between bushland areas and residential gardens which are vitally important as foraging habitats for wildlife during the winter months;
 - a noticeable loss of birdlife and mammals due to the loss of habitat;
 - loss of mature trees that will take 50-100 to replace to their full potential.
- There is anecdotally an increase in the number of injuries of unskilled tree loppers. The industry is totally unregulated with any idiot able to walk into Bunnings, buy a 50cm chainsaw for less than \$300 and go out and chop down trees for other people. In fact any homeowner can do the same. The industry already has the one of the highest rate of injury per 100,000 workers of any industry in NSW. A huge number of unskilled loppers joined the ranks of professional arborists removing trees as soon as the RFS 10/50 clearing code was introduced.

The photo below shows a tree lopping crew that took down a massive eucalyptus, put the trunk on a flat bed truck and drove off.



Before the truck had even got half way around the first corner one of the two massive sections of trunk rolled off the back of the truck and crashed to the ground (photo below), narrowly missing the pedestrian that took these photos. The tree loppers didn't secure the trunks to the truck. Hardly what one could call a skilled crew. But no doubt they were nevertheless cheap. If this truck had reached the main road the results could have been catastrophic in traffic.



- Vegetation should be assessed by experts from, or accredited by, the RFS to determine the bush fire risk, rather than having the responsibility assigned to landowners. Self assessment is still too complex for landowners to determine whether clearance is legal and whether valuable environmental assets are being unknowingly removed.
 - The description of what constitutes a tree under the 10/50 Code is problematic -
 - **Tree:** a perennial woody plant that is three or more metres in height and that has one or more self-supporting trunks (at least one of which has a circumference at a height of 1.3 metres above ground of more than 0.3 metres) but it does not include a woody plant that is:
 - a. a shrub, which is a small, low growing, woody plant with multiple stems, or
 - b. a vine, which is a woody plant that depends on an erect substrate to grow on.

There are a significant number of native trees that are slow growing and/or have narrow circumferences. One such example is the Black Sheoak (*Allocasuarina littoralis*). This tree is a critical food source for the Glossy Black Cockatoo (*Calyptorhynchus lathami*), which is listed as a Vulnerable Threatened Species in NSW (below).



The slender trunks of the Black Sheoak mean that it can be cleared as a small diameter tree. Some landowners will/can also mistake it for a shrub that can be cleared within 50 metres of a dwelling (the "50" part of 10/50). This can result in areas of critical habitat for the Glossy Black Cockatoo being totally decimated.

This occurred recently on a property adjacent to the Berowra Valley National Park. Every Black Sheoak (*Allocasuarina littoralis*) across the upper half of property was cut down (see following four photos) resulting in the loss of an important environmental asset.





- Allowing clearing without approval is likely to result in environmental considerations being either disregarded or inadequately assessed. Just a few months after the trees in the preceding photos were lopped, the local brigade of the Rural Fire Service undertook a hazard reduction burn across the lower half of the property described above at the request of the owner. Additional lopped trunks of Black Sheoak (*Allocasuarina littoralis*) can be seen in the photograph below as well as many of the younger trees still standing that had not been cut. In total nearly a hectare of Black Sheoak was destroyed, virtually the whole stand of this critical food source for the Glossy Black Cockatoo in the Berowra Valley area was wiped out. Black Sheoak trees do not withstand fires, it kills them.

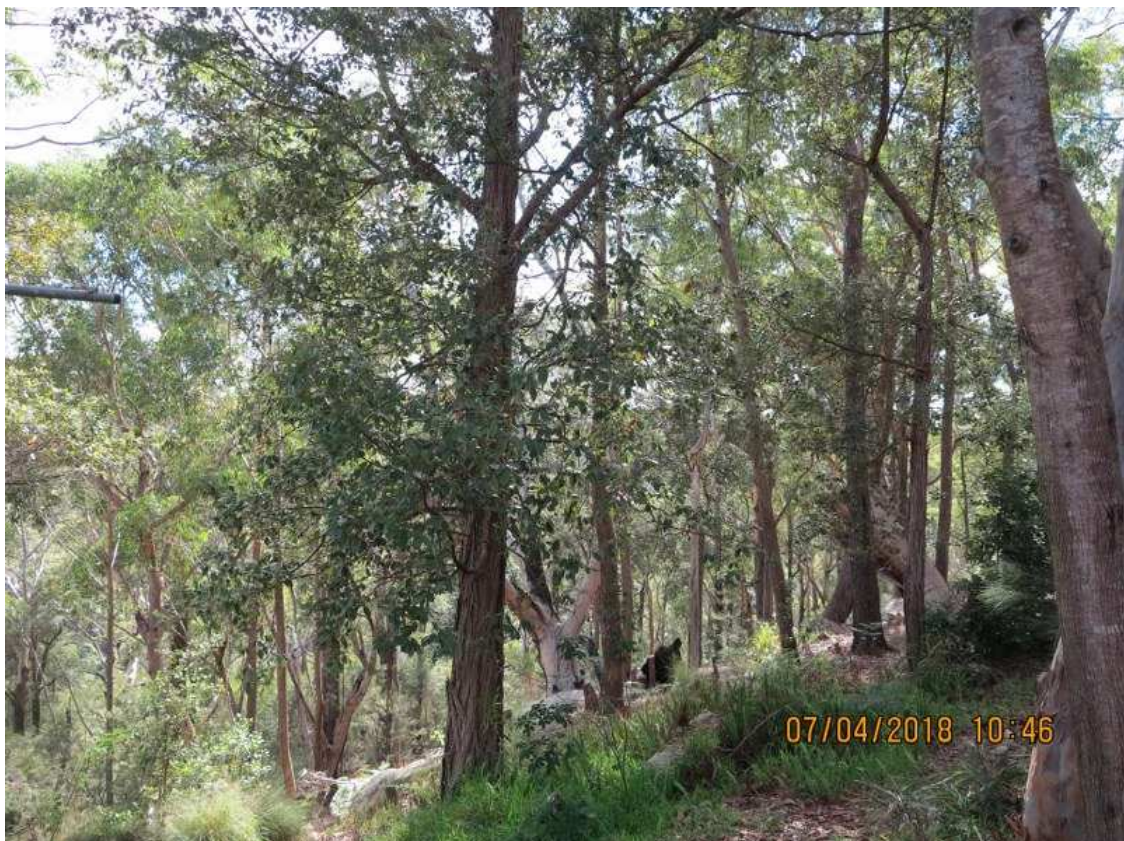
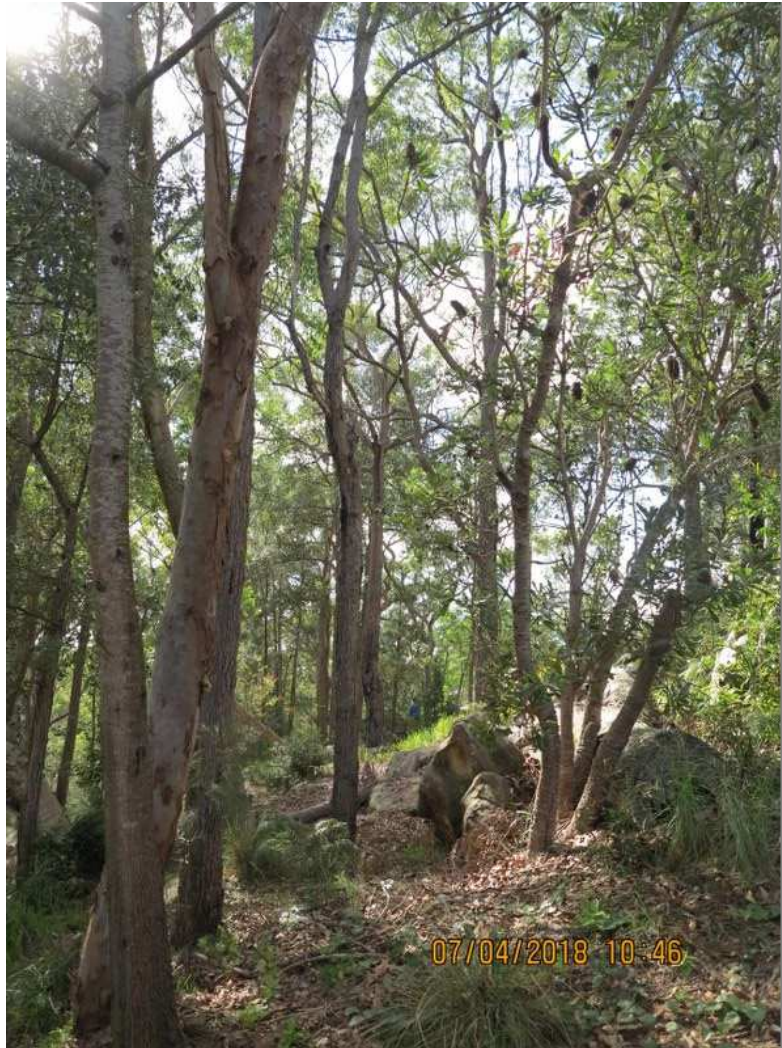
A pair of these Glossy Black Cockatoos had been sighted just days before the burnoff. While there will eventually be new trees sprouting from seed in the soil, it will be decades before these trees are large enough to sustain the Glossy Black Cockatoos.



There was only one small patch of Black Sheoak (*Allocasuarina littoralis*) left intact, due to the fact that it is growing just over the cliff edge. It can be seen from the photo below just how slender these trees are, even when fully mature (mid-ground of the photo, up against the cliff edge). The broad-brush self-assessment of the 10/50 Clearing Code is devastating to this species.



The two photos below show how beautiful the property was before the owner decimated it under the 10/50 Code. A development application was lodged soon after the burnoff occurred.



- The practice of removing all trees within 10 metres and all vegetation within 50 metres of a habitable dwelling (10/50) is inconsistent with recommendations of the recently gazetted Planning for Bushfire Protection (PBP) 2018. While it is understood that 10/50 is for existing dwellings and PBP is for new developments or alterations, the differences are confusing to the general public and the 10/50 code causes environmental impacts that have a far greater impact.
 - PBP requires clearing for an asset protection zone on the hazard side of a dwelling only; 10/50 unnecessarily permits clearing on all four sides of a dwelling, greatly increasing the amount of trees and vegetation permitted to be removed;
 - PBP does not require complete removal of trees and vegetation within the area closest to the dwelling; 10/50 allows complete removal of trees within 10m and vegetation within 50m.

The relevant clauses from Planning for Bushfire Protection 2018 are -

3.2 Asset Protection Zone (APZ)

An APZ is a buffer zone between a bush fire hazard and buildings. The APZ is managed progressively to minimise fuel loads and reduce potential radiant heat levels, flame, smoke and ember attack. The appropriate APZ distance is based on vegetation type, slope and the nature of the development.

An APZ, if designed correctly and maintained regularly, will reduce the risk of:

- direct flame contact on the asset
- damage to the built asset from intense radiant heat
- ember attack.

The APZ should be located between an asset and the bush fire hazard.

Inner protection areas (IPAs)

The IPA is the area closest to the asset and creates a fuel-managed area which can minimise the impact of direct flame contact and radiant heat on the development and be a defensible space. Vegetation within the IPA should be kept to a minimum level. Litter fuels within the IPA should be kept below 1cm in height and be discontinuous.

In practical terms the IPA is typically the curtilage around the dwelling, consisting of a mown lawn and well maintained gardens.

When establishing and maintaining an IPA the following requirements apply:

Trees:

- canopy cover should be less than 15% (at maturity)
- trees (at maturity) should not touch or overhang the building
- lower limbs should be removed up to a height of 2m above ground
- canopies should be separated by 2 to 5m
- preference should be given to smooth barked and evergreen trees.

The relevant clause from RFS 10/50 Clearing Code allowing complete clearing from all four sides of a dwelling is -

7 Vegetation clearing provisions

7.1 Clearing distance

In accordance with Part 4 Division 9 of the [Rural Fires Act 1997](#), a landowner may carry out the following vegetation clearing work on their own land:

- the removal, destruction (by means other than fire) or pruning of any vegetation (including trees) within 10 metres; and
- the removal, destruction (by means other than fire) or pruning of any vegetation, (except for trees) within 50 metres

of an external wall of a building containing habitable rooms that comprises, or is part of residential accommodation or a high-risk facility; or of an external wall of a building that comprises or is part of a farm shed.

- Most property losses during the 2020 bushfire season were due to severe to catastrophic intensity of the fires which no amount of tree or vegetation clearing could ameliorate. Even already burnt grasslands were re-igniting. Spot fires occurred kilometres from the fire front regardless of any APZ, resulting in the failure of most APZs. If anything, ember attack is made worse by tree removal. As described by the Royal Commission into the Victorian fires, trees that have a high water content in their leaves are particularly useful in preventing embers from being blown onto a house. They are also helpful radiant heat shields.
- Clearing into National Parks and council land for asset protection to bordering properties must not be allowed. The area of public land that would be cleared would not be acceptable. Habitat connectivity would be impacted. The size of the area of bushland that would be cleared if it was allowed into National Parks alone would be staggering. In the northern suburbs of Sydney surrounding Berowra Valley National Park and Ku-ring-gai National Park, as well as in areas such as the Blue Mountains, thousands of properties have boundaries adjacent to these Parks.

There could be pressure on the local councils to undertake the clearing work. The cost implications of clearing, not to mention regular maintenance, would be beyond the resources of local councils. Then again, even worse, the National Party has suggested that property owners should be allowed to do the work - something cost focused governments might applaud. However that would have the same disastrous self-assessment problems as currently exists with the 10/50 Clearing Code. Additionally, weeds would quickly take over the cleared areas and propagate into the bushland. The discontinuity between the bushland and adjoining residential properties would cause a difficulties for wildlife. Private properties provide much needed foraging during the sparse winter months but they would become difficult to access for all fauna except birds. Residents also have no idea of Threatened species or critical habitats and many simply don't care. It is also likely ill-informed suburban residents would not remove the vegetation they fell within the Parks (too costly, doesn't belong to them), making the area even more hazardous.

- Native vegetation should not be cleared without a well-informed assessment, particularly if it is only a low bush fire risk. The environment should be a key consideration in managing bush fires. Many homeowners are unlikely to know what Threatened species, habitat values and other environmental matters should be considered. The RFS must regain its role in providing onsite advice and approval for hazard reduction activities. Property owners have confidence in RFS advice. People should be encouraged to ask for assistance from qualified officers to help assess environmental and bush fire management matters, not rely on poorly informed self assessment.

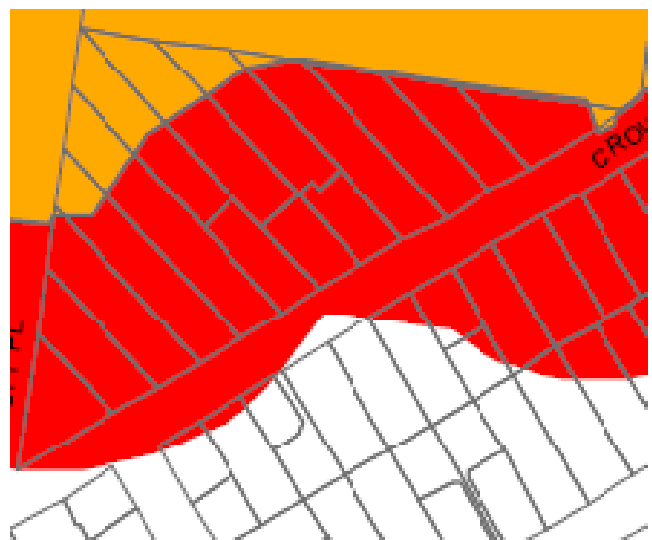
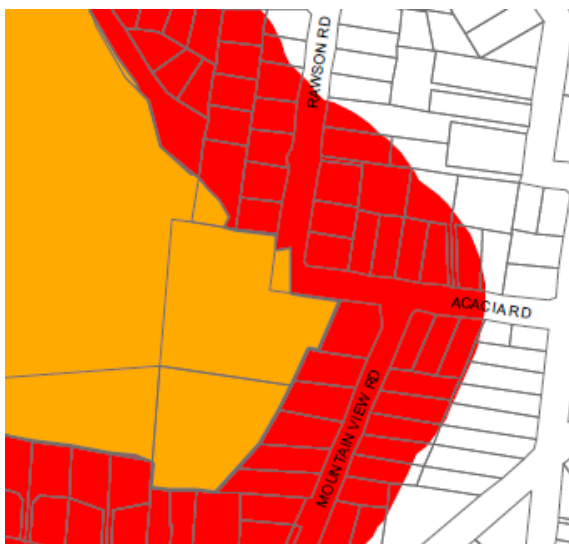
Homeowners should be required to notify the RFS and relevant land manager (eg Council) of any proposed clearing prior to commencement to ensure that it is necessary, compliant and no threatened species or EECs will be impacted. The Code makes no provision for this or for the monitoring and reporting of clearance. Often it is not clearing of live standing trees or shrubs that is necessary but the removal of on-ground dried fuel, a distinction unknown to the general public and best assessed by experienced personnel within the RFS.

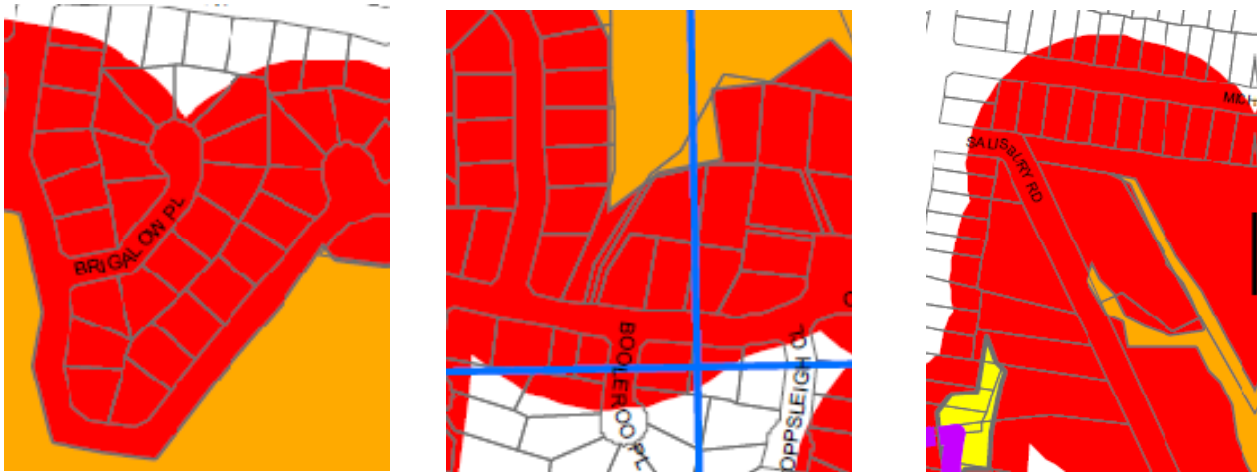
- NSW RFS has a streamlined cost-effective environmental approval process in place that enables assessment of bush fire hazard reduction activities. The Bush Fire Environmental Assessment Code provides for hazard management appropriate to individual sites and identifies vegetation management that does not need to involve removal of all vegetation. There is no provision for this type of engagement within the code which is based entirely on self-assessment.
- Vegetation management should be promoted as just one of a suite of bush fire prevention measures, and not as the only solution. Lessening engagement by the Rural Fire Service with at-risk communities has reduced the important role it plays in advising homeowners in other key bush fire management and maintenance measures.

This is important where homeowners are unaware of other risks on their property. Prior to the 10/50 Code introduction a resident in the residential area of Hills Shire arranged for a visit from an RFS officer to determine whether one of the trees was a bushfire risk. The RFS advised that no the tree was not a risk but the large stack of firewood alongside his house certainly was. After 10/50 was introduced the tree was lopped but the stack of firewood against the house just consequently increased in size. The result, one lopped tree, an increased fire risk and no bushfire hazard protection benefit.

- Homeowners need to notify the RFS and relevant councils of vegetation clearance proposed so local fire managers have an up-to-date understanding of the clearance being undertaken. Monitoring vegetation clearance carried out under the Code is not be possible without having a reporting process in place. Without records the level of abuse of the Code is not evident.
- The mapping tool is inaccurate with buffer zones not aligning with borders of vegetation hazards. Numerous properties are caught in the entitlement areas that should not be included. The entitlement areas apply even if only one or two square metres of a property are within a buffer zone. This allows unnecessary tree removal as well as significantly increasing building costs. There should be a mechanism whereby individuals can get incorrectly assessed properties removed from the entitlement areas, making alterations or new homes less costly.

Below are a small sample where corners of properties in Hornsby Shire that are arbitrarily included where the buffer zone does not align parallel with the hazard, or where the narrow strip of vegetation does not realistically warrant a buffer zone. While many councils have removed these anomalies, many have not as there is a regulatory paperwork cost for the council. Yet it's a very costly slapstick approach for the property owners if they wish to rebuild or renovate.





- A 5-year Statutory Review has not yet taken place. A formal review was commenced following only two months of the scheme's operation, rather than two years operation as was the original intent of the legislation. It is therefore questionable whether any review has been done that assesses the full impact of the Code over time.

This Bushfire Inquiry must not replace the Statutory Review. It is doubtful given the wording of the Terms of Reference for the Bushfire Inquiry, that many of the thousands of people that made submissions to the first Review would have any idea that this Inquiry might include consideration of the RFS 10/50 Clearing Code. It is also doubtful that legally an Inquiry could replace a Review.

- The policy objectives of the Code no longer remain valid, the scheme's terms are no longer appropriate for securing those objectives and there have been significant unintended outcomes. The Royal Commission into the Victorian bushfires recommended that their equivalent of the 10/50 Code should be repealed after the Victorian bushfire prone land maps were completed. Unfortunately, for the sake of political expedience, that particular Royal Commission recommendation was ignored. The NSW bushfire prone land maps are now completed and the RFS 10/50 Clearing Code should be repealed if the Royal Commission's recommendations are to be taken seriously and the environmental degradations it causes reduced. Additionally, given the length of time the Code has been in operation, it is likely that the most hazardous vegetation has already been approved.

The unintended consequences and the abuses of the Code make it imperative that the 10/50 Clearing Code be repealed and replaced with a certification system by qualified consultants. This would be consistent with the operational model for Planning for Bushfire Protection that has been in place since 2006 and was updated in 2018.

- Opportunities to reduce bushfire hazards that are legal and lawful are welcome. However, at a time when there is still ongoing removal of healthy trees under the 10/50 scheme, that appear to have little to do with bushfire hazard protection, and where reversing the decline in tree canopy is a key objective of the Greater Sydney Commission, a formal review of the RFS 10/50 Clearing Code should be undertaken, separate to this Bushfire Inquiry.

Any recommendations made by the NSW Bushfire Inquiry should include replacing the self-assessment RFS 10/50 Clearing Code with certificates provided by either the RFS or certified bushfire consultants, in the same manner as approvals for Planning for Bushfire Protection.

Regarding the Planning for Bushfire Protections 2018 for new dwellings and alterations, which is also enacted in accordance with the Rural Fires Act 1997 legislation:

- The practice of allowing developers to use Private Certifiers to provide them with Bush Fire Assessments raises questions of inherent conflicts of interests when Certifiers are being paid by developers. Assessments frequently contain information that is incomplete or misleading.

The Bushfire Assessment is also often produced 'in isolation' from other consultants' reports such as the Arboricultural Impact Assessment, Flora and Fauna Assessment or Heritage Assessment, the result being that the proposed Bushfire Protection Measures and even the Asset Protection Zones are not able to be adequately assessed by the Bushfire Consultant. It should be mandatory that Bushfire Consultants must be provided with all requisite consultants' assessments prior to the Bushfire Assessment being issued. If trees are to be retained, it impacts on the assessment.

- The Bushfire Assessments are then referred to the RFS by Councils to obtain General Terms of Approval for properties in fire prone land. The referrals to the RFS occur at the same time as the public exhibitions, which is largely due to the assessment time constraints imposed on Councils by the EP&A Act. The RFS is therefore unaware when issuing their GTAs, of any inconsistencies between the Bushfire Assessments and other Assessments, that are often raised in submissions by residents who are aware of local constraints.

The RFS therefore often issues General Terms of Approval that are based on incomplete or misleading information. The developer can then use that GTA to overrule objections that Councils may have in terms of bushfire risk. Furthermore the developer is permitted to have direct contact with the RFS which is denied to the community, who are therefore unable to raise issues of incorrect or incomplete information prior to the RFS issuing the General Terms of Approval. The RFS must not rely only on information provided to it by developers. There must be a mechanism instituted whereby public submissions are also provided to the RFS prior to their issuing GTAs.

- The Land and Environment Court is able to accept the RFS General Terms of Approval over and above objections by Council. Residents report that developers can and do meet with the RFS onsite immediately prior to a Land and Environment Court hearing, often without Council officers being in attendance. This has occurred on a number of developments in Hornsby Shire. The developer then produced a GTA on the first day of the Court hearings, when the RFS had not previously provided GTAs for the developments.
- Of further concern is the ability for some Private Certifiers to be registered to provide "Performance Solutions". In essence this enables the requirements of the RFS Planning for Bushfire Protection (both 2006 and 2018) to be circumvented. Requirements for minimum road widths, road surfaces, turning heads, passing bays, water storage capacity and the size of APZs are all requirements that can and have been set aside for so-called Performance Solutions.
- There is no entity that has satisfactory oversight of consultants who provide Bushfire Impact Assessments. The Building Professionals Board has issued fines to consultants in the past but these individuals are then still allowed to practice. One consultant has had fines issued for more than 20 non-compliant certifications in bushfire prone lands but has been allowed to continue practicing. There must be a reliable complaints mechanism put in place so that consultants that are certifying dwellings that are not compliant with Planning for Bushfire Protection are barred from practicing for periods of time, as well as being fined.

- Both Councils and the Land and Environment Court accept an RFS General Terms of Approval as being approval for a particular development. This is not the case. The GTA only applies if the Terms of Approval are met, which frequently they are not. However Councils and LEC assume that a GTA is an automatic approval.
- With extreme bushfire events becoming more of a regular occurrence it is imperative to ensure that new and infill developments have the strongest possible Bushfire Protection Measures. The current development assessment process does not provide that.

Additional issues that need to be addressed include:

- Hazard reduction burning in Natural Parks and other natural areas located far from built assets is unlikely to be effective in the long term as the window of opportunity for safe and effective hazard reduction burning is more restricted. Any hazard reduction burning should be concentrated near to built assets.
- **It is imperative that water or fire retardant bombing aircraft and must be directed to extinguish fires at the first outbreak of fire in National and Regional Parks, even if the fire is in an area located far from built assets.** The decision, at whatever level, to permit the 2020 fires to burn through vast areas of remote bushland significantly contributed to the fires becoming so massive they were unstoppable. (Appendix 1 contains quotes from state fire-chiefs)

While the theory may have been to save money on the use of aircraft, and in the longer term to facilitate reduction of so-called 'fuel loads' in National Parks, in a time of severe drought, with little ground or vegetation moisture and no rain forecast to halt the fires, many people consider it was an ill-considered application of the Federal/State government funding procedure. Timely use of an aerial unit is an absolute necessity not an accounting exercise. Funding must also be allocated for an enlarged permanent national aerial bushfire fighting fleet of aircraft.

- The new aerial unit also needs to include a team of "smokejumpers", or firefighters who can rappel from helicopters to utilize chainsaws, hoes and other tools to set up containment lines around fires in remote areas. These units are successfully used in California and other US states.
- Logging and clearing in Koala habitat must cease until the burnt areas within their habitat have made a substantial recovery. Logging has resumed despite the heavy losses the species took. These areas include but are not limited to south west Sydney eg Campbelltown and Wilton as well as northern NSW.
- Any allocation of resources recommended by this Inquiry should include funding and guidelines for post fire restoration and rehabilitation, particularly for threatened species and ecological communities.
- **While there has been enormous pressure, particularly from the National Party and some sections of the media, to open National Parks for grazing, there is little if any grassland for sheep and cattle grazing within National Parks. Any grazing would include the regrowth species found in the National Park bushlands, the grazing of which would be extremely detrimental to the recovery of the National Parks estate.**

APPENDIX 1 - Water bombing in remote areas

<https://www.watoday.com.au/politics/federal/ex-fire-chiefs-say-ridiculous-bushfire-funding-stymies-waterbombing-20200228-p545dz.html>

Ex-fire chiefs say 'ridiculous' bushfire funding stymies waterbombing

By [Mike Foley](#) and [Alexandra Smith](#)

February 28, 2020 — 3.30pm

Former fire chiefs say a "ridiculous" bushfire funding rule is preventing emergency services from waterbombing small fires before they turn into mega blazes that destroy homes and kill people.

Federal funding can flow to state governments under the Disaster Recovery Funding Arrangements with up to 75 per cent of costs covered - but only in “extraordinary” circumstances when firefighting was targeted at “imminent” risks to lives and property.

That means states may have to carry the cost of early prevention waterbombing on fires in remote areas, well away from lives and property. This summer a number of small fires in remote areas became major blazes that destroyed homes in NSW and Victoria.

NSW has confirmed it would seek “partial reimbursement” from the federal government for its firefighting efforts, including waterbombing, since July last year.

Victoria’s former Emergency Management Commissioner Craig Lapsley said funding arrangements had stopped fire managers sending planes to waterbomb small fires in wilderness.

“Without doubt there are definitely examples from this summer where fires got too big for ground suppression to be effective, but if more aircraft were deployed earlier there would have been a better chance to keep fires small,” Mr Lapsley said.

Mr Lapsley said “operational people have not stuffed up” with their deployment of resources, but had done “the best they could” under the current arrangements.

“There have been examples where questions about the utilisation of large aerial tankers in remote areas has been questioned over the deployment of them - which is not the right way to consider any deployment of those aircraft,” he said.

A NSW government spokesman said it estimated an “additional” \$315 million went to the Rural Fire Service for increased costs this summer, and the state would request funding from the federal government.

The Tasmanian government has lodged a special request for funding to help cover the cost of fires that began in late 2018 and burned in World Heritage wilderness. Spokespeople for the Tasmanian and federal governments said negotiations over funding are ongoing.

This year lightning strikes lead to huge blazes in remote bushland in the Snowy Mountains and a series of fires that burned across East Gippsland in Victoria. **The Gospers Mountain fire began in the Wollemi National Park in the Blue Mountains World Heritage Area and burnt for months over a total area of 444,000 hectares.**

(Had this fire jumped the Hawkesbury River, the consequences for Hornsby Shire would have been dire, where the firefront could have quite feasibly reached the populated rural areas).

Former NSW Fire and Rescue commissioner Greg Mullins said the national disaster funding is a “ridiculous rule”.

“Look at the size of the fires - more than five million hectares in NSW. The majority of the area burnt was nowhere near homes and people, but we lost more than 10 times more property than any time in NSW’s history,” Mr Mullins said.

Former Victorian Country Fire Authority chief Neil Bibby said many of this summer's fires could have been tackled before they burned towards towns and property with greater aerial resources.

“It’s a fundamental theory: put the fire out when it’s small and then you don’t have as big of a problem,” he said.

Wilderness Society policy director Tim Beshara said beefing up aerial firefighting would improve public safety, benefit nature, and help meet Australia’s international environment obligations.

“It makes no sense on any level that the Commonwealth automatically stumps up for firefighting costs when a fire is near a home or a farm but not for putting out a fire in the middle of a World Heritage Area,” he said.

The National Aerial Firefighting Centre owns a fleet of 150 aircraft and is funded by state, territory and the federal governments. The federal government contributes \$15 million a year, with Prime Minister Scott Morrison announcing in early January he would commit an extra \$11 million each year toward the agency each year.

The current fire season is ongoing and NAFC has not calculated its costs. Last year its costs exceeded \$130 million over a less intense fire season and a spokesperson said the costs for this year’s fire season are expected to be “significantly higher”.

State governments have two years to lodge funding applications under Disaster Recovery Funding and none have done so for this summer's fires.