



Nature Conservation Council

The voice for nature in NSW

NSW Rural Fire Service

By email: 10.50@rfs.nsw.gov.au

12 November 2014

Submission to Review of 10/50 Vegetation Clearing Code of Practice

Dear Sir/Madam,

The Nature Conservation Council of NSW (NCC) is the peak environment organisation for New South Wales, representing 130 member societies across the state. Together we are committed to protecting and conserving the wildlife, landscapes and natural resources of NSW. Our members have a strong interest in planning and environment decisions in their local areas.

NCC welcomes the opportunity to participate in the review of the 10/50 Vegetation Clearing Code of Practice (the Code). This review has been brought forward by the Rural Fire Service (RFS) to commence on 1st October 2014 following a spate of concerns raised by councils and community groups regarding the introduction of the Code and the process by which the vegetation clearing entitlement areas were established. This early review suggests an acknowledgement of the lack of community consultation that marked the introduction of the Code and of its poor design. The recent minor changes reducing the extent of some vegetation clearing entitlement areas and the proposals for further amendments based on the size of bushland areas suggests that this review is timely. The Government should seize this opportunity to listen to the community, significantly amend the Code and stop its misuse.

NCC continues to support the longstanding RFS policies and procedures that promote ecologically sustainable bush fire management while aiming to achieve sound bush fire protection outcomes. NCC recognises the importance of minimising the threat to life and property, however the *Rural Fires Act 1997* also requires that activities undertaken under the Act are implemented with the protection of the environment and the principles of ecologically sustainable development in mind. The *Rural Fires Amendment (Vegetation Clearing) Bill 2014* and the Code fall short of what is required, with their design meaning that environmental issues are either not properly considered or are disregarded. In addition, rather than being used for bush fire protection reasons, the Code and the vegetation clearing entitlement process have been very successful in encouraging the inappropriate removal of vegetation for ulterior motives, and causing considerable angst in communities where the new law has been widely misused.

In its submission on the draft Code of Practice, NCC highlighted its concerns with the design of the Code and the way in which it was introduced. Effective bush fire protection requires a landscape based risk assessment approach that allocates strategies and resources appropriate to the identified risk. It does this with both bush fire protection imperatives and environmental and community values in mind. This Code cannot be shown to achieve either, with no underpinning evidence base

that demonstrates it will result in improved bush fire protection outcomes and not cause unnecessary environmental harm.

Along with many Councils and community groups NCC calls for a Moratorium on the application of the Code to stop its continued misuse by unscrupulous individuals removing trees and other vegetation in urban areas for non-bush fire purposes. A moratorium will halt the unnecessary tree clearing that is changing the character of streets and suburbs throughout Sydney and other urban parts of the State.

Following is a summary of the concerns that many in the community have shared with NCC and that have become evident since the Code's introduction.

1. Inappropriate use of 10/50 vegetation clearing entitlement

Since its introduction records accumulated by a number of Councils in Sydney suggest the 10/50 rule has been used almost exclusively to remove trees to improve views, facilitate development and other non-bushfire related purposes. The vegetation clearing entitlements provided under the 10/50 rule are not being used for bush fire protection, with reports indicating that people are much more likely to use it as a way of removing trees that are perceived as an obstacle or nuisance. Extensive misuse of the Code and the vegetation clearing entitlements is occurring.

In its current form this law is being used primarily to remove vegetation to circumvent environmental laws that restrict development outcomes or to remove constraints on potential future financial gains. Data collected by a small number of Councils shows that trees in particular have not been removed for bush fire protection. This suggests that the *Rural Fires Act 1997* is not the most appropriate legislation to have included the amendments that established and support the Code. If the Code is to be used primarily to aid planning and development by removing environmental constraints and Government chooses to persist with it, transparency as to its real purpose should be obvious and not veiled under the guise of bush fire protection.

2. Vegetation removal for bush fire protection

A significant body of research has been conducted on fire behaviour and managing bush fire risk in Australia. Unfortunately this knowledge continues to be largely ineffectively disseminated to the broader community. This has often resulted in passion rather than science dictating how fire is perceived, leading to communities putting pressure on government that results in kneejerk responses – as has occurred with the introduction of the 10/50 rule.

The RFS document 'Standards for Asset Protection Zones' states that fuel reduction does not require removal of all vegetation because it would cause environmental damage. It also emphasises the value of trees and plants in providing some bush fire protection from strong winds, intense heat and flying embers and changing wind patterns.

The 10/50 rule reinforces perceptions that all vegetation is bad from a fire perspective, and if it can be eliminated from around houses then protection from bush fires will be secured. Providing a vegetation removal mechanism as a stand-alone measure that people can undertake without also obtaining advice about other equally or more relevant bush fire matters is a dangerous precedent. The reason that direct engagement by fire authorities

with communities in bush fire prone areas has been seen as necessary is because it is an effective means of persuading individuals and communities to take responsibility for their own safety. By removing direct engagement with the RFS in initial hazard assessment procedures, the 10/50 rule works against bringing the community along in taking a shared responsibility in bush fire protection.

3. An ineffective bush fire protection mechanism

The tree removals and other vegetation clearance undertaken under the Code will have little impact on improving bush fire protection. The RFS states that research shows historically that 99% of homes destroyed by bush fires were located within 350 metres of bushland, so the 10/50 rule will make it easier for people in designated areas to improve the safety of their homes. However, less emphasis is placed on the fact that historically about 85% or more of the properties lost in major bush fires have been located within 100 metres of the bushland interface, and that research consistently highlights ember attack as the main cause of house losses (over 90%). Those houses closest to bushland are vulnerable to flame contact and radiant heat impact, but for most dwellings within 350 metres of bushland, bush fire protection should be concentrated on reducing the vulnerability of houses to ember attack.

This is reflected in AS3959-2009 *Construction of buildings in bushfire prone areas*, which limits bush fire requirements for new developments to those buildings located within 100 metres of vegetation, the assumption being the risk of ember attack – the cause of the majority of house losses, is relatively low beyond this distance.

Embers from bush fires can travel several kilometres and start spot fires by lodging in gaps in the structure of buildings, in loose flammable fuels such as mulches, or on suburban fuels that are part and parcel of urban life. Embers that cause the combustion of suburban fuels are a significant cause of house ignition during bush fires, with timber fences, timber decks, rubbish, stored and random materials on the house and around the property, and houses themselves all identified as potential ignition sources. Ignoring these ignition sources and focusing on vegetation removal in the hope it will reduce house losses through ember ignitions disregards accepted scientific studies. The 10/50 rule also assumes that tree and vegetation removal will improve bush fire protection without acknowledging that management of subsequent plantings and suburban fuels and implementation of maintenance regimes is required to have any real improvement in protection. Research also shows that human behaviour has a significant impact on house loss. People's activity, level of preparedness and presence before, during and after a fire plays an important role in whether a house survives. A focus by the community on vegetation removal relegates this important aspect to a secondary consideration.

A fuel reduced area located immediately around a habitable building is an important bush fire protection measure, and used in conjunction with other measures such as property maintenance, appropriate building standards and fire suppression infrastructure, can provide key benefits by reducing radiant heat and the potential for direct flame contact on buildings. However, the likelihood of radiant heat and direct flame contact impacting buildings decreases significantly as the distance from bushland increases and an urban landscape predominates. The likelihood that any house losses will be due to ember attack also increases as distance from bushland increases. There is no evidence that suggests the indiscriminate removal of trees by residents is likely to remove the threat from ember

attack. Just because a property is cleared of all vegetation does not mean that it will still not be vulnerable to ember attack, particularly if buildings are poorly designed, constructed or maintained.

Reducing the impact of ember attack will not be achieved through a piecemeal approach, where one part of the puzzle is addressed but all others are disregarded. While only vegetation removal is encouraged by the 10/50 rule, other ember ignition sources are not addressed at all. There is not much to be practically gained in legislating for the removal of vegetation in the name of bush fire protection, and then allowing homeowners to do as they please regards accumulation of other fuels that pose an equal threat. Nor is there much point in focusing on vegetation removal if protection of the dwelling itself from ember attack is not addressed.

4. Excessive vegetation clearing entitlement areas

In response to community concerns modest changes to the 10/50 rule were recently announced. These changes relate to the extent of the Vegetation Clearing Entitlement Areas being reduced from the blanket 350 metre buffer from all bush fire prone land to 150 metres near vegetation that poses a reduced fire risk such as rainforest and grassland, and adjacent to small isolated areas of vegetation that may be reclassified by Councils to areas of lower risk (Category 2 vegetation). The changes to the overall extent of vegetation entitlement areas in any one Local Government Area will be very limited, and the level of unnecessary tree removals will reduce only minimally.

The introduction of remnant vegetation and short fire run definitions into the *“Guide for Bush Fire Prone Land Mapping 2014”* provides some opportunity for an increase in the number of small isolated areas of vegetation that can be reduced to having a 150m buffer. However, these areas will need to be reclassified and remapped by relevant Councils from Vegetation Category 1 to Vegetation Category 2, and then the maps recertified by the RFS – a process that could take some time, dependent upon Council resources and priorities and agreement by the RFS.

The Bush Fire Prone Land Maps prepared for each Local Government Area currently have a maximum buffer of 100 metres from the edge of the bushland extending into urban or rural areas. Beyond that distance, in NSW there is no consideration of bush fire requirements for new developments, including vegetation clearance. The 10/50 vegetation clearing entitlement areas extend an additional 250 metres into developed areas, overriding tree preservation orders, NSW threatened species legislation and most other environmental requirements without any discernible bush fire protection advantage provided to existing houses or residents. It is well acknowledged that bush fire protection is best achieved through the implementation of a combination of bush fire protection measures. Enabling residents to clear vegetation without assessment and approval by the RFS and in a piecemeal way, rather than undertaking a strategically well thought out approach with bush fire risk at the forefront, as currently occurs for new dwellings, is a very ineffectual way *‘to reduce the risk of bush fire’* – the stated aim of the Code.

The extent of the vegetation clearing entitlement areas needs to be reduced significantly to reflect the real bush fire risk presented by vegetation that is isolated from bush fire prone land. There is no explicit evidence that allowing ad-hoc clearing of trees and other vegetation will provide real protection benefits, and NCC believes that entitlements to clear

vegetation without approval should be brought to an end. At a minimum, the vegetation clearing entitlements should be reduced to extend no more than 100 metres from mapped bush fire prone lands.

5. Unnecessary overriding of vegetation protection laws

Protection of threatened species, heritage listed trees, low risk vegetation such as rainforest and vegetation protected under Tree Preservation Orders and other local instruments is overridden by the Code. This means that the strong scientific evidence that is the foundation for the protection of threatened species or Endangered Ecological Communities (EECs) can be disregarded without any consideration of the impact of removal. Agreement by the Office of Environment and Heritage (OEH) to the amendments to the *National Parks and Wildlife 1974* (NPW Act) enabled by the *Rural Fires Amendment (Vegetation Clearing) Act 2014* is reprehensible. The protection of life and property may well take priority in bush fire protection matters, but under the NPW Act a primary objective is the conservation of nature, including the conservation of biological diversity at the community, species and genetic levels. OEH has primary administrative responsibility for the protection of threatened species and their habitat, endangered populations and EECs, and must be more rigorous in its assessment of the potential impacts to protected natural assets, particularly when there is no sound evidence that the new laws will provide actual bush fire protection benefits. As well as showing indifference by OEH to its responsibilities under the NPW Act, it also highlights a lack of commitment by OEH and the NSW Government to the long-term conservation of species and EECs listed under the *Threatened Species Conservation Act 1995*.

Tree Preservation Orders (TPOs) that have often been put in place as a result of long-standing community support now have no enforcement where the Code applies. Many of the trees removed and which have enjoyed protection under TPOs and other instruments have been remnant native trees of high scientific importance. Rainforest and other vegetation that can buffer risk due to its reduced potential to burn can be cleared and more flammable vegetation planted in its place. Trees that are known active food trees for iconic endangered species such as koalas can be removed without any assessment of the impact on the koala population, and Development Control Plans that include provisions for the protection of vegetation and habitat on environmentally sensitive or urban lands are undermined.

Exhibiting its high level of inconsistency with other laws, the Code clearly contradicts the RFS guide "*Planning for Bush Fire Protection 2006*" which specifies scientifically based distances for Asset Protection Zones (APZs) around new developments in Bush Fire Prone areas. A significant amount of work by both Councils and the RFS has been undertaken to design Asset Protection Zones that achieve ecological outcomes and ensure bush fire hazards are well managed. By sanctioning the removal of vegetation beyond that allowed by the development consent process, the 10/50 rule can make conditions of consent redundant once a house has been built, including the retention of identified habitat and vegetation protected by title deed.

The legislation and the Code should be amended to reinstate protective measures that reduce the clearing of vegetation that is protected under other legal instruments. Laws that protect vegetation have evolved over several decades due to strong community support. It is completely counter-productive to have laws in place that protect vegetation

and then introduce an ill-considered law that overrides those protections and allows indiscriminate clearing of that protected vegetation by residents uninformed about bush fire risk.

6. Need for the homeowner to be better prepared

The 10/50 rule will have little impact in providing protection during major bush fires at the landscape level. With ember attack the main cause of house losses, all materials liable to ember attack that occur on properties would need to be removed and all houses upgraded to be ember-proof. The RFS stresses that the 10/50 rule is an entitlement, not a requirement, so the likelihood that voluntary vegetation removal will ensue in any significant reduction in risk at the landscape level is minimal – particularly when the management of other fuels is not addressed.

The removal of vegetation for bush fire protection should be accompanied by simple retrofitting and a requirement to remove other bush fire hazards. If vegetation removal is considered necessary by homeowners because they consider it a bush fire hazard, surely other types of bush fire hazards on the property should be identified and treated. This would include upgrading the house on the property to achieve a basic level of ember-proofing. Ember attack protections need not be overly expensive and can be simple to retrofit to a structure. Metal fly screens on window openings, sealing gaps around doors, installing metal mesh to seal vents and weepholes, sealing around roofing, and sealing other gaps around the house are all relatively low cost actions that will reduce vulnerability of a house to direct attack by flying embers.

The completion of a Bush Fire Survival Plan that describes regular maintenance activities and identifies and reduces the likelihood of urban fuels becoming a fire source should also be included as an accompanying requirement to vegetation removal. Preparedness to undertake some retrofitting and completion of a Bush Fire Survival Plan would transparently suggest that any vegetation removal under the Code was actually being undertaken for bush fire protection. This would also reinstate the opportunity for engagement by the RFS with residents concerned about bush fire protection.

The most important objective for implementing bush fire protection measures is the protection of human life. The planning, construction and maintenance of a dwelling and its immediate surroundings should be undertaken with this at the forefront. Managing bush fire risk involves far more than managing trees, with it being fundamental to integrate considerations of human behaviour. Policies that strengthen people's sense of complacency and erode realistic perceptions of bush fire risk may put more lives at risk. The focus on vegetation clearing may well lead to a sense of community complacency and unrealistic perceptions of safety, resulting in lessened opportunities for community engagement.

7. Inappropriate one-size-fits-all model

The Blue Mountains bushfires in October 2013 were the catalyst for the introduction of the 10/50 rule in NSW. The Blue Mountains is one of the most bush fire prone areas in the world, with poor planning of development and the inappropriate location of homes placing a significant percentage of properties at extreme risk from bush fire.

The application of the 10/50 rule to all bush fire prone land mapped across the State fails to consider either landscapes and the associated bush fire risk, or individual locations and their level of bush fire risk, and is clearly inappropriate for many Council areas. *Planning for Bush Fire Protection 2006* identifies three fire weather areas across NSW, with most areas falling into two major fire weather areas and therefore two Bush Fire Attack categories based on Fire Danger Index. Only Council areas located in the Greater Hunter, Greater Sydney Region, Illawarra Shoalhaven, Far South Coast and Southern Ranges are allocated the higher Fire Danger Index rating (100). The rest of the State's Council areas are allocated a Fire Danger Index rating of 80. *Planning for Bush Fire Protection 2006* recognises that there is a lesser level of bush fire attack for different fire weather areas, and the models to calculate asset protection zones (i.e. the extent of vegetation clearance required) are partly based on the Fire Danger Index allocated to an area.

The Code takes no such account of fire weather areas, or of the extent of clearance that is actually required around a habitable dwelling. Because it is a broad-brush approach that allows 10 metres clearance of trees and 50 metres clearance of other vegetation around habitable buildings it cannot consider the true bush fire risk even at the landscape level, let alone the risk associated with any one dwelling. As has been identified since the introduction of the Code, such an approach allows residents to clear without having to consider the actual bush fire risk to their property, and as identified by many Councils this one-size-fits-all approach is inappropriate.

The application of a one-size-fits-all approach implies that 10 metres clearance of trees and 50 metres clearance of other vegetation is needed to provide adequate protection. This is not true as different locations and different properties will involve individual vegetation management and other bush fire protection requirements. Scientific research that is properly applied by RFS specialists needs to be the basis upon which the distance required for vegetation management is ascertained. Providing arbitrary 10 and 50 metre clearance entitlements has also resulted in pressure being applied to neighbours and public land managers to clear vegetation to provide what is now seen as a right to bush fire protection.

8. No understanding of its impact or effectiveness

It is incomprehensible that the Code was introduced without any monitoring and reporting mechanism included to enable an assessment of its uptake, its unintended impacts, or its effectiveness. In Victoria, since its earlier introduction of the 10/30 rule and then the 10/50 rule, there has been no assessment undertaken of the value of those laws in reducing bush fire risk. There has been no monitoring of their uptake to remove vegetation for reasons other than bush fire protection, and it is not known what the extent of their effectiveness will be in preventing houses from being lost during bush fires. The lack of a notification/monitoring system built into the Code suggests that Government has little desire to understand how much clearance takes place under the Code, nor to know about its impact or effectiveness.

Compliance with the Code and the Vegetation Clearing Entitlement Areas has been left to agencies that administer the laws overridden or otherwise affected by the Code. In most cases this role has been left to local councils, with no recognition by the State Government of the time and expense this would incur. Due to the lack of guidance provided by the Code it is likely that Councils will concentrate their efforts on upholding vegetation

protection instruments on those lands not subject to the Code. Whether the Code is being followed by those residents allowed to clear under a vegetation clearing entitlement will not be monitored by any agency, and therefore compliance with the Code will not be monitored.

The introduction of the 10/50 rule indicates that the Government felt the assessment and approval system for removal of vegetation under the Hazard Reduction Certificate process was inadequate. In light of the considerable number of problems that have been detailed and have prompted this early review, it would be prudent to ascertain the likely impacts and effectiveness of the 10/50 rule as an alternative to the previous processes. This could be done by announcing an assessment of the Code's use and suspending its use in all areas other than some discrete areas (e.g. Blue Mountains) where its application, unintended impacts and its value in providing bush fire protection outcomes should be monitored and evaluated. This would provide a preliminary study into the uptake of the 10/50 rule and its outcomes in an area already acknowledged for its vulnerability to bush fire.

In those areas where the Code had been suspended, residents would still be able to remove vegetation for bush fire protection purposes through the existing Hazard Reduction Certificate process, with assessment and approval by the experts from the RFS. The issuing of Hazard Reduction Certificates provides valuable opportunities for the RFS to provide additional advice on other hazard reduction measures.

In light of the lack of information regarding the actual value of the Code in providing additional bush fire protection, trialling of it in discrete extreme bush fire risk areas would allow some assessment of its value following bush fires, while avoiding the unnecessary destruction of valuable trees and habitat across the state. There should be a commitment for the RFS to undertake a detailed assessment of its effectiveness following any bush fires, and a commitment to rescind the 10/50 rule if bush fire protection benefits cannot be clearly demonstrated.

CONCLUSION

The amendments to legislation enabled by the Rural Fires Amendment (Vegetation Clearing) Bill 2014, the design of the 10/50 Vegetation Clearing Code of Practice and the extent of the Vegetation Clearing Entitlement Areas including their reliance on Bush Fire Prone Land Maps that were never designed as anything other than a trigger to assess bush fire protection for proposed new developments, all require significant amendments if the Code is to be an instrument that provides any real improvement in bush fire protection to residents most vulnerable to bush fires. Significant deficiencies have already been exposed and the door opened to allow considerable unregulated clearance of vegetation, loss of habitats and reduced protection of threatened species and endangered ecological communities, with little basis to show there will be gains in bush fire risk management.

Our comments highlight the inherent difficulties with a self-assessable approach to managing bush fire risk. NCC welcomes this early review but recognises the wide-spread impacts that misuse of the Code has already caused. We urge the following:

- I. The enabling legislation and the Code need to be amended significantly to ensure real bush fire protection measures for properties in identified high-risk areas can be**

- implemented without causing unnecessary environmental damage.** The current design of the Code is fundamentally flawed and recent amendments to the vegetation clearing entitlement areas do little to halt the unnecessary destruction of trees and other valued vegetation under the Code.
- II. **A Moratorium on the application of the Code is called for to stop its misuse.** The one-size-fits-all approach that the Code applies across the State is inappropriate and should be recognised by this review. To allow time for proper consideration of the wide range of issues caused by the Code's introduction, trialing it in a small number of specific areas to assess its uptake, impacts and likely effectiveness could be undertaken.
 - III. **The Code must be amended to ensure that it cannot be misused.** The Code and the vegetation clearing entitlements are being widely misused by residents to achieve outcomes that have nothing to do with bush fire risk. If it is the intent to allow the Code to be used for other than bush fire protection, this should be described in its introduction.
 - IV. **Vegetation assessment needs to be returned to the experts from the RFS to formulate treatments that will actually reduce risk.** There needs to be a return to the scientifically based risk assessment approach that has been adopted for the preparation of Bush Fire Risk Management Plans based on assessment of the actual risk and treatments that address the risk.
 - V. **The Code must be amended to stop indiscriminate removal of trees that does little to reduce actual risk.** Scientific research highlights that ember attack causes the majority of house losses during major bush fires. The removal of trees and shrubs that do not form a continuous layer of fuel will not remove the threat of ember attack.
 - VI. **The amendments to the *National Parks and Wildlife Act 1974* and *Rural Fires Act 1997* need to be rescinded by Government to reverse overriding of the NPW Act and other relevant Acts and instruments by the Code.** Amendments must be put in place to ensure existing laws and instruments that protect vegetation are upheld, and remove the contradictions apparent between vegetation protection laws and the Code.
 - VII. **There should be accompanying bush fire risk mitigation requirements for homeowners who wish to undertake vegetation removal under the Code.** These could include simple retrofitting of habitable buildings on the property and completion of a Bush Fire Survival Plan that outlines preparedness procedures and activities.
 - VIII. **A notification and reporting mechanism should be included in the Code** to enable Councils to fully understand the extent of its uptake and impacts, and provide fire authorities with an understanding of the extent of clearance undertaken. This would provide initial information from which to begin ascertaining any bush fire protection value that may be attributable to the Code. Annual reporting by the RFS of vegetation clearance would provide a summary of the vegetation removed under the Code and enable a transparent assessment of its effectiveness.

- IX. **Continuation of the 10/50 rule should incorporate a commitment to undertake a detailed assessment of its effectiveness** and a commitment by Government to rescind the enabling legislation and the Code if bush fire protection benefits cannot be clearly demonstrated.

Thank you for taking the time to consider our submission. If you require any further information, please contact me on 02 9516 1488 or email: ksmolski@nature.org.au.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Kate Smolski', with a stylized flourish at the end.

Kate Smolski
Chief Executive Officer