



<https://www.nsw.gov.au/nsw-government/projects-and-initiatives/make-submission-to-bushfire-inquiry>

1.1 Causes and Contributing Factors

Climate change and inadequate measures taken to stop its progression.

Good account of a family in Wollondilly near Wilton who were really affected by the Jan 2020 fires:

<https://www.abc.net.au/7.30/dozens-of-homes-lost-in-bushfires-south-west-of/11816412>

1.2 Preparation and Planning

What housing goes where? Provision of land for housing development in Wilton is developer led, which does not consider the appropriateness of the location for suburban housing or the likelihood of impact from bushfire. Selection criteria when developers take the lead consists of largely economic factors ie will they gain significant value uplift from rezoning, and what is the maximum number of urban blocks can they achieve from the footprint. This system needs to change. There are areas being rezoned for urban development that are in entirely inappropriate locations in terms of bushfire risk, but also inappropriate due to habitat loss, proximity to drinking water catchment, distance from existing services, and lack of regular train and bus transport services. The outcome for future residents and fire services is resultingly poor in many of these new greenfield areas – poor safety during bushfire, adverse health and impacts on family life from long commutes, etc.

Timelines: The planning process leads to long protracted planning timelines with Bushfire assessments done often 10 years or so before urban development is realised. These assessments are done by consultants paid for by the developers who have a vested interest in their urban capable land not showing too much red and orange. Over the life of the planning process, many more overlying measures that often conflict with the bushfire assessment and its assumptions are put in place (biodiversity not considered, tree canopy percentage targets added, green grids and tree lined streets added, further densification of urban development by the developer, “low density” considered to include blocks down to 225m², flexible planning measures put in place to please developers without proper checks and balances, rezoning includes NO MINIMUM BLOCK SIZE). It is a planning mess, with no requirement for currency or cross checking against other requirements. Eg below:

Bushfire Assessment - OEH submission to DPIE on Wilton South East - 2017

The *Wilton Junction Bushfire Protection Assessment* (BPA) (Whelans Insites 2014) covers the entire Wilton PGA and is based on site investigations in May and June 2013. It has not been

updated to consider the Biodiversity Study. The BPA states that due to “*much of the Wilton Junction areas being affected by large APZ requirements it is envisioned that some areas of forest beyond the dashed green line on the plan set may be managed as an outer protection area*”. (OEH bolded text).

This is not consistent with the Biodiversity Framework that states bushfire asset protection zones for new urban development should be located outside of the proposed conservation areas (ELA 2017 p25) or the LUIIP Background Report (p50) that states that asset protection zones should be located wholly within the urban suitable land for new developments and not within high biodiversity constrained land.

New “Urban Development Zone” (UDZ) applied to whole development area, giving developer cart blanche flexibility to change what is provided within the zone as long as it is generally in accordance with the structure plan. Precinct rezoned with no minimum block size and urban development zone flexibility.

Wilton South DA contains inconsistencies with application of where the asset protection zone can be placed. They also contain blocks so constrained by asset protection zones that often 50% or more of the residential block cannot be built upon, as can be seen below.

Smaller lots are:
1351,1366,1684 Width 17m,
25m & 19m. Length to
boundary 46m, 42m & 42m so
these lucky guys at best have
an APZ of 32m. That’s 10m’s for
the home site.

Lot 1688 to 1701 approx
boundary fence is 18m width
length of each site is 60m
approx. According to the table
below, the APZ is 32 to 70m
long so half to all of each site is
APZ as it has not been allocated
for.

This comment is in direct
contrast to the 2006 report
that is in the same paragraph.
The APZ should be inclusive in
the development site &
maintained by it. Not pushed
across the boundary onto
neighbouring properties

APZ page taken directly from the DA. The size of the vulnerable lots backing directly onto the boundary according to the DA (realizing this may change to smaller as this site has a UDZ, which means the developer can change at any time) are listed to the left.

8.4 INNER AND OUTER PROTECTION AREAS

Planning for Bushfire Protection makes provision for reducing the impact of Asset Protection Zones on developable land by allowing asset protection zones around forest vegetation to be split into Inner Protection Areas (IPAs) and Outer Protection Areas (OPAs). IPAs and OPAs require different management levels in order to achieve a satisfactory overall APZ; these are described as follows:

“An IPA should provide a tree canopy cover of less than 15% and should be located greater than 2 metres from any part of the roofline of a dwelling. Garden beds of flammable shrubs are not to be located under trees and should be no closer than 10 metres from an exposed window or door. Trees should have lower limbs removed up to a height of 2 metres above the ground.”

“An OPA should provide a tree canopy cover of less than 30% and should have understorey managed (mowed) to treat all shrubs and grasses on an annual basis in advance of the fire season (usually September).”

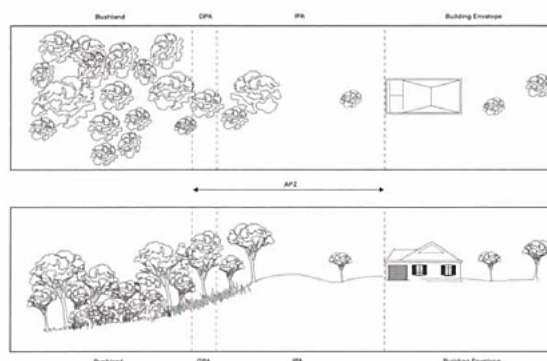


Figure 7.1 - OPAs and IPAs as used in Asset Protection Zones

Property length 60m, APZ 32m to 70m

Due to much of the Wilton Junction area being affected by large APZ requirements it is envisioned that some areas of forest beyond the dashed green line on the plan set may be managed as an outer protection area. Table A2.7 in Planning for Bushfire Protection lists the size of allowable OPAs and is reproduced below:

No 21 to No 23 are the areas with the house lots that do not have a perimeter road. The desire to relocate a fire trail to be part of the APZ is in vast contradiction to the guide lines set out in the major report that is listed in the DA as being the guide lines that this project is being built to.

20	Southern boundary grasslands	Grasslands (consider relocating fire trail to along site boundary) (existing SFAZ should be included in APZ)	>0° - 5° downslope (insites' plan)	10m (32m for forest)	≈36m (70m for forest)
21	South-western boundary Forest/woodlands	Woodland / Forest (consider relocating fire trail to along site boundary) (existing SFAZ should be included in APZ)	>0° - 5° downslope (insites' plan)	32m	70m
22	Southern boundary Forest/woodlands	Grasslands (consider relocating fire trail to along site boundary) (existing SFAZ should be included in APZ)	>0° - 5° downslope (insites' plan)	10m (32m for forest)	≈36m (70m for forest)
23	South-eastern boundary Forest/woodlands	Woodlands / Forest (existing SFAZ should be included in APZ)	>0° - 5° downslope (insites' plan)	32m	70m
24	Southern boundary forest	Forest	>0° - 5° downslope (insites' plan)	32m	70m

Bushfire danger zones are assessed by consultants for developers, and seem to vanish at the boundary of the proposed urban area, as can be seen below on the south west side where the actual shapes of the bushfire vulnerable area mysteriously takes on the exact shape of the Wilton South East Precinct Boundary:

Bushfire Protection Assessment
Wilton Junction, Wilton

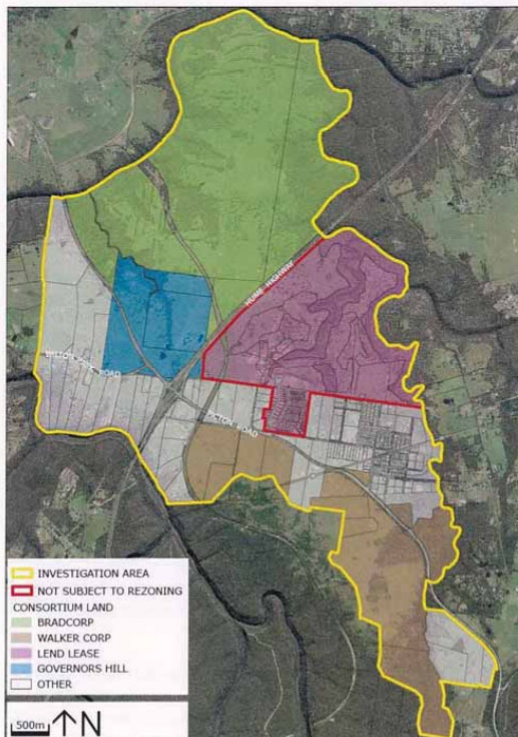
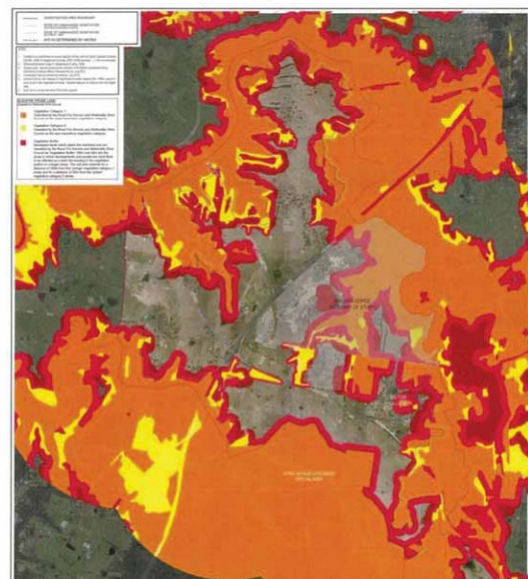


Figure 2.4 –Landowners, InSites 2013

Bushfire Protection Assessment
Wilton Junction, Wilton



WAG submits that Urban housing, at the block sizes that are currently favoured by developers, is not appropriate in bushfire prone areas. In "Landscape and Building Design for Bushfire Areas" by Caird Ramsay, & Lisle Rudolph 2003, they identify the risks of small lots and the ability to modify the

potential for bushfire attack within the boundaries being inadequate due to lack of space. The homeowners of these small lots are unable to manage their bushfire risk due to the limited size of the block, and what vegetation and combustible materials are present in neighbouring blocks, over which they have no control. This is happening now in greenfield areas across the country. The asset protection zone of the perimeter homeowners of the suburb is not going to save the houses one street in from the perimeter. Ember attack doesn't cease one row of houses into the estate.

Climate Resilience is a planning requirement of the structure plan (Section 7.4) and District planning goals – and is related to Bushfire risk mitigation.

The planning assessment for the Wilton South East DA has not demonstrated how it meets the objectives of the structure plan in this regard

So what are the issues?

1. The structure plan states that the South West is already experiencing more hotter than average days than other parts of Greater Sydney, and extreme heat will be a challenge for the precinct (pg 19 Background analysis)
2. The site has low canopy cover, bushfire risk, is drought prone, and will be prone to heat island effects and heatwave disasters, following urban development
3. Climate change conditions over the next 30 years need to be a major consideration for this design.
4. The IPCC report projects a 1.5% temperature increase
5. We are in a much drier bio-region than Sydney and this needs to be taken into account
6. The proposal for a Green Grid to support the entire growth area, has not been planned or assessed for its effectiveness, impact to biodiversity, safety in the case of bushfires, and its viability to manage and mitigate ongoing climate change impact
7. The condition of consent for monitoring heat island effects is meaningless
Is this condition necessary because the development is at risk of extreme heat island effects?
Who is responsible for monitoring it?
What happens with the results?

So what has not been done ?

The structure plan states that to achieve climate resilience for housing best available evidence and risk assessment should be undertaken. This has not been done sufficiently.

- a. The tree scape relies upon climate resilient water supplies, which have not been adequately substantiated.

- b. The landscape plan projects 40% tree canopy achieved by largely by planting 3 large native evergreens in the backyard, 2 large evergreens in the front yard and 3 streets trees for every 400 sqm block.

This is unrealistic on a site where 50% of blocks are between 225 and 400sqm, a site that will be car dependent with at least 2 cars per house and parking at a premium, and perimeter blocks have large asset protection zones. Note that the structure plan states that stage 1 is low density (225m2 is now low density??).

So what needs to be done ?

- 8. A full assessment of the viability and effectiveness of the Green Grid DCP and the design outcomes against heatwave, drought management, bushfire risk and water security for tree survival. This needs to move beyond streetscape beautification and address the real issues of future proofing and climate resilience
- 9. The lessons from Oran Park must be applied to the development so the same mistakes and outcomes are not repeated
- 10. The conditions of consent for management of heat island effects need to be reconsidered

WAG argued that consent should not be given, because there is inadequate planning consideration in the site design and tree risk impacts in the context of climate change risk. This is a MANDATORY consideration of Environmentally Sustainable Development and it is in the public interest that it is rigorously addressed. Community concern was not enough. The DA was passed.

1.3 Response to Bushfires

Proper planning. Do not put urban development in these high danger zones. Research, research and more research. Alternative building methods. Rammed earth? Double glazing? No gap building envelopes? Moisture levels in the surrounds, flammability, what works, what doesn't. Study and apply the knowledge. The way we have always done it is no longer the way we should do it. The climate is changing. Old ways are no longer easy to implement, or able to mitigate the effects. Burnt areas were re-burning only one year later. Moisture is key. We need to keep the moisture in the plants, in the soil, in the environment. Reduce risk by seeking to preserve moisture. Research how best this can be done and if it is effective across all ecosystems and urban interfaces. Education. People need to know how to prepare, what to do. Prepare early. Keep up with this message. As an Australian, living in an urban area is no protection. We all need to know how be safe when bushfire threatens. The recent fires have etched into our minds that the entire country is at risk.

1.4 Any other matters

TRAFFIC: Local traffic impacts from increasing population density result in roads and intersections at failure performance standards during normal use, as upgrades to intersections are often not

delivered until significant progress on lot development is achieved. These intersections will be at a standstill during bushfire evacuations, and may result in the public experiencing bushfire overrun of them whilst they are stuck in their vehicles in a traffic jam. The need to evacuate in these situations must be reconsidered – as it places people in more danger than they would have been if they stayed at home.

DOING THINGS DIFFERENTLY: What measures could be put in place now, to ensure that sheltering in place is achievable? What is appropriate development? What areas should never be developed? What is the cumulative risk of more and more development? What is the impact of more and more people? We need to get better at understanding cumulative risk. We need to get better at wresting control of the planning system away from those that use it to generate profit, and back into the hands of those who live in it, those who form its community, those who build their homes in it. Put the community back at the top of the planning approval tree.

PREVENTION: What can we do to keep moisture in the landscape and ensure that the bone dry conditions do not persist from the bush right up to the urban interface and the proverbial back door? What can we do to increase the time water is resident in the landscape and keeping the humidity and temperature down, thus also reducing the fire risk? Certainly, reconsidering the way that we drain streets, rooves, and suburbs could be turned on its head – we could use all that water and delay its progress through the landscape, store it in the soil, in the vegetation, instead of confining it to pipes and quickly sending it to the nearest drain.

RISK: The future risk to Wollondilly – housing risk, housing standards, development standards, growth, and increasing urban densification. These are the risks that put peoples lives in peril. We cannot continue down the path of business as usual. We must adapt, reassess and consider strategic assessment of entire precincts. The EPA act should be strengthened so that community and environment groups with legitimate concerns can win in court against poor and unsafe proposals. Strategies for evacuation or sheltering in place need to be considered as part of the planning cycle, and also rolled out across existing housing stock. We need to protect people and property. We need resilience to natural hazards by avoiding the hazards. Separation distance between buildings is not even considered in the planning framework, yet is of vital importance in the event of a bushfire. Avoid dense urban forms in hazardous areas. Do not put people in harms way just to achieve developer profit. Get rid of the culture that has the overriding desire to please the stakeholder that bashes the loudest on the planning door. The developers will be long gone when the homeowner is perishing in the flames.

Thankyou for the opportunity to provide this feedback.

Fiona Bullivant

Secretary, Wilton Action Group