Report to the Conservation Council of the ACT (Consact)

On the consultations for the development of

a revised Strategic Bushfire Management Plan (Version 2)

Background

In July 2007 Consact held a bushfire workshop "Future Burning" which brought together key players in the ACT debate on bushfire management: ESA and RFS; TAMS; officers from regional NPWS; independent scientists such as Roger Good; and Consact members. The workshop was facilitated by Lyn Goldsworthy and Clare Henderson and achieved a small miracle by getting some agreement between groups who hitherto had not seen eye-to-eye on anything much to do with bushfire planning.

> Attachment A is the statement released by the groups at the end of the workshop which set the scene for future co-operation between the community and government sectors.

Strategic Bushfire Management Plan Committee

Then in August 2007 Consact I was the Consact nominee to a committee formed by the ESA Commissioner under S 73 of the Emergencies Act 2004 to advise on the re-development of the Strategic Bushfire Management Plan (Version 1 January 2005). The committee met fairly regularly, under the care and control of Nick Lhuede of the Emergency Services Authority through 2007-08 and an exposure draft of the new plan was released in March 2009.

The SBMP Consultation Process

Parts one and two of the exposure draft are available at www.esa.act.gov.au with hard copies also available through Canberra Connect and at public libraries. This plan will operate for the next five years but the maps indicate a ten year plan for fuel management which will take the plans up to 2019.

Part three consists of maps showing critical bushfire management information and locations of actions proposed to reduce fire risk and implement parts of the Strategic Bushfire Management Plan (SBMP). These maps were presented and explained at a series of community meetings held in southern ACT at the Namadgi Visitors Centre, central ACT at Rivers Fire Shed and northern ACT at ESA offices at Fairburn. There were two meetings at each location, the first to introduce and explain the information contained in the maps and the second to record community comments and concerns. An interval of ten days between the meetings allowed community members to consult others, discuss and examine the maps carefully. There were also two urban consultations conducted by the urban fire service chiefly to address residential issues about bushfire. I did not attend these but I understand attendance was small but the meetings were positive and covered people's concerns.

Southern rural consultation
This was held at Namadgi Visitors Centre on 28 April and 7 May. The first meeting saw 3-4 only private land managers attend and 3 NPA ACT members. They expressed concern about fences being burnt during prescribed burns and wanted guarantees the government would pay for replacement fencing. At the second meeting there were 7-8 private land managers who were generally more positive about being consulted but wanted prescribed burns on TAMS managed land rather than theirs because of concerns about feed paddocks being ruined by fire. RFS stated clearly that some of the proposed burns would need to involve private land managers because there were no natural boundaries between TAMS and private land for some of the proposed prescribed burns. The Farm Firewise program staff will negotiate with individual land managers to work out what will suit.

Attachment B is a summary of issues raised by NPA ACT members.

North western rural consultation
This was held at the Rivers Fire Shed and was much better attended with about 15 private land managers and a number of RFS volunteers attending. Again fencing was an issue (it was initially raised same gentleman who raised it at the southern rural consultation but it was a general concern). A major issue was a concern that fire came from the NSW national parks and this was not being addressed. It would have been helpful to have the Bimberi and Brindabella National Parks bushfire maps so people could see that the two jurisdictions were planning similar strategies and were co-operating with each other. Another concern was that the Murrumbidgee River acted as a 'wick' to draw fire up the river corridor and TAMS plans to plant more trees there. Weeds along the river corridor were also a concern.

At the end of the second session participants spontaneously thanked ESA, RFS and TAMS staff for developing a plan which was far better than any previous plan and which they thought gave them a far better chance of defending their properties against bushfire.

Attachment C is a summary of issues raised by NPA ACT members.

North eastern rural consultation
This was well attended and brought up some new issues from the private land managers who include grape and truffle growers so there is a more complex set of agriculture activities. It included graziers from the Kowen forest area also. Similar concerns were raised about fencing and about preferring hazard reduction being carried out on TAMS managed land, including Mt Majura, but participants were happy with the explanations given for the way the strategy worked over the ten year period to protect their holdings. Again, fire coming from NSW was a concern and again, it would have been good to have relevant NSW fire management strategies on display as well. Again, at the end of the second session participants spontaneously thanked ESA, RFS and TAMS staff for putting together a workable plan which they were happy with.

There were no members of Landcare groups attending – see additional briefings below - and comments by Consact members were submitted separately for this section of the consultations.

Additional briefings by TAMS

As part of this process, TAMS organised three briefings for the Conservation Council and Landcare groups to provide information on fire management proposals for government managed lands in the ACT. A particular focus was the management of environmental assets identified in the bushfire planning process. Margaret Kitchin of the Research and Monitoring Unit of TAMS and Dylan Kendall of the Fire Management Unit of TAMS gave a presentation which:

- outlined the risks of fire starting, spreading and causing damage to the assets identified in the SBMP;
- outlined the development of required fire intervals for the various ecological communities throughout the ACT and how these intervals would be applied;
- identified areas of Strategic Bushfire Advantage Zones identified in the SBMP for the periods 2009-2014 and 2015-2019 and how fuel reduction measures would be applied to the different areas;
- identified the extent to which the required fire intervals would be exceeded in the overall configuration of fuel reduction actions: no more than 35% for most vegetation communities; and no more than 5% for endangered communities, small communities and communities from which fire should be excluded ;
- outlined plans to avoid fire in some areas classified as 'long unburnt' as a control measure.

Each session then ended up with participants poring over the maps provided and making comments on specific areas including: known habitat trees; species which did not cope well with fire; vegetation response to previous prescribed burns and other matters which may affect specific fuel reduction activities. These comments will be provided directly to TAMS staff but I have asked for a copy to be forwarded to me so ConsACT can monitor future concerns and actions.

Attachment D is a summary of those concerns passed on to me. Others were made directly to ESA and TAMS staff.

Response to Concerns raised by ConsACT members

ESA and TAMS have responded in detail to the concerns raised in the consultation process and all issues have been published on the web at www.esa.act.gov.au/ESAWebsite/content_esa/bushfires/sbmp/sbmp_page.html . It is clear that community concerns have been treated seriously and changes made where ESA and TAMS have seen a need. The major points to note in this response are:

- The Regional Fire Management maps are not being tabled as part of the statutory SBMP but as supporting documentation which means that TAMS can alter the plans as needs require.
- Areas of prescribed burning have been increased slightly around Mt Majura but without any impact on the Glossy Black Cockatoo habitat.
- The old Grassy Creek Fire Trail is being retained. The trail was identified for closure because it impacts on the riparian zones around Grassy Creek itself but will remain open to facilitate the dog control program and the prescribed burn in 2009-11; (this breaks a major commitment by TAMS in 2005 to rehabilitate this fire trail)

- The Blue Gum Creek area has been withdrawn from the prescribed burning plans for this 10 year period. Instead an area on Mt Tennant will be subject to prescribed burning but the area is well outside the stands of callitris on the northern flank.
- The proposal to burn Stockyard Creek area twice in the ten year period has been reduced to one burn, balanced by the bringing forward of the burn east of Leura Gap to the 2009-11 period and a second small burn along the Stockyard Creek fire trail.
- Gudgenby Bush regeneration area is now formally recognised as not to be burnt in this ten year period;
- Reductions in proposed rural burns include reduction of the 30 metres around the koala enclosure at Tidbinbilla to 20 metres; reduction on the size of the burn at Fishing Gap to protect infrastructure
- Reductions in proposed urban burns include the Macarthur Ave/Dryandra Street burn is being done only once in the ten years not twice; the area to be burnt twice the top of Black Mountain is reduced to the immediate vicinity of the car park and the rest of the area will be burnt only once; north of Walu Street in Aranda will only be burnt once; the area in the new arboretum proposed for burning five times in ten years is being reviewed in light of new plantings.
- Some concerns will be directly addressed in the burn plans, eg burns will be planned to take account of moisture differentials between dry and wet forests to prevent fire damaging wet forests which have different fire tolerances to dry forest areas. Other strategies include clearing around important environmental and heritage assets such as the heritage tree in Aranda which have been identified by the community to prevent burns damaging them; additional work to combat erosion in areas such as around Nil Desperandum regardless of whether prescribed burning goes ahead or not; and specific ignition patterns to direct fire away from assets.

ConsACT member who put in specific concerns should follow these up at the website mentioned above.

Proposed Follow up

These plans have been put up on the web for public comment and final approval after which they will become part of the formal fire management plan. I am not sure if they will have formal statutory status but there is clear agreement they will need to be reviewed and adapted each year, depending on weather, fuel loads, unplanned fire etc.

Once gazetted, it is important that Consact continue to monitor the SBMP and TAMS fire management strategies over the coming years. NPA ACT is happy to take a lead agency role in this, reporting in the first instance to the Biodiversity Committee of ConsACT. Also the Landcare Network, currently run by Sally McIntosh at the Stromlo Depot of PCL has undertaken to facilitate annual updates of proposed prescribed burns with Landcare groups working in urban nature parks.

The SBMP will be reviewed again in five years time and ConsACT needs to ensure that there is adequate funding for research and monitoring between now and then.

Recommendations

Recommendation 1: that ConsACT support the final version of the SBMP 2009 and lobbies for bi-partisan support in the Legislative Assembly when the plan is tabled.

Recommendation 2: That ConsACT monitor actions undertaken under the terms of the SBMP over the next 10 years and lobbies governments across that time frame to ensure that conservation values and environmental assets in the ACT are sufficiently protected; and ensures that sufficient monitoring, research and follow up is undertaken to ensure that the SBMP continues to follow best practice in fire management and environmental asset protection.

Recommendation 3: ConsACT hold a members' forum on the new SBMP, including part three, to review the research on fire management; clarify concerns, questions etc about SBMP 2; and establish monitoring and follow-up of implementation of the plan over the next fire years.

Recommendation 4: That ConsACT work with ESA to hold a second workshop to follow up on the common ground established in the "Future Burning" workshop after the Victorian Royal Commission into the Victorian bushfires has handed down its final report. There is a possibility that ESA may find some funds as it did last time.

C Goonrey September 2009

Attachment A

'Future Burning: meeting the challenge of fire management'

Workshop 27-28 September 2007

Workshop Report – 10 October 2007 2

Workshop context / overview of outcomes

Finding common ground for ACT and regional fire management

In September 2007, 28 fire management practitioners and policy makers gathered over two days to discuss and explore common ground on ACT and regional fire management. The objective of the workshop '*Future Burning: Meeting the Challenge of Bushfire Management'* was to build constructive dialogue between key stakeholders with a role or interest in fire management so as to increase future collaboration particularly within the context of an uncertain fire future, such as under a climatic changing world. The workshop was timely taking place immediately prior to the official start of the

2007-08 bushfire season and in time to contribute to the review the ACT Strategic Bushfire Management Plan.

Jointly initiated by the Conservation Council of the South East Region and Canberra and the Emergency Services Agency, the workshop aimed to discuss fire management away from the previous forms of consultation around specific fire management proposals, plans or a fire event. It was understood by participants that it was not a decision-making forum, he views of all stakeholders were not necessarily represented and has to be viewed in the wider context of a number of other processes relating to fire planning and ongoing land management.

Workshop participants included government officials with responsibility for fire management, conservationists, scientists, volunteer fire fighters, professional firefighters, land managers, rural landholders and community groups. Participants identified a number of common values, a series of challenges facing various stakeholders and suggested some ways forward. The most notable shared view was the importance of bipartisan support and continuity in government policy, structure, strategies and budget for fire management in the ACT. Participants noted one step towards developing this would be a transparent and inclusive process in the current review of the Strategic Bushfire Management Plan framework and the forthcoming sub-regional planning processes. Participants acknowledged the need to protect life and property as well as the importance of protecting our environmental assets.

A prominent recurring challenge identified was finding the balance between fuel management practices which conflict with other land management objectives, particularly environmental and catchment protection. A second recurring challenge was the use of science in fire management, particularly 'conflicting' scientific advice and translating research and scientific information into operational practise.

A key theme was the importance of working in partnership, particularly planning with the community in order to build an understanding and acceptance of shared and personal responsibility in regard to fire management.

Overall participants welcomed the opportunity to talk in an 'unpressured' environment, and supported ongoing dialogue.

Attachment B

Mr Nick Lhuede
Mr Neil Cooper
Ms Margaret Kitchin
Mr Dylan Kendall

Thank you for the opportunity for NPA ACT to meet with you to discuss prescribed burning plans for the southern ACT region, including the Gudgenby/Tennent areas of Namadgi National Park. There are a number of concerns we would like to put on the public record.

Firstly, we remain largely unconvinced that prescribed burning, except on a massive and damaging scale, provides any long term advantage other than a nominal risk mitigation in the fire season. A prescribed burn, properly carried out, gives a fire advantage for 3-5 years. Unless a fire occurs precisely in the area to be protected by a prescribed burn, under the weather conditions assumed in the risk assessment process and in the 3-5 year timeframe from the prescribed burn, it will have delivered no fire fighting advantage. In fact prescribed burning can create a fire disadvantage in subsequent years from the increase in fire-generated re-growth.

However, we have been told often enough that the alternative to prescribed burning is doing nothing and that doing nothing is not an option so we have entered into this process in good faith. The concerns about the specific prescribed burning plans outlined for the Gudgenby and Tennent areas are:

- The nominated fire zones and their associated prescribed burning plans assume a rate of steady and predictable growth of fire fuel which may not be justified. Since 2003 fuel loads have not increased at the rate some fire experts predicted and prescribed burns have been postponed because of a lack of ground fuel. There needs to be a proviso on all prescribed burning plans that activities are subject to a demonstrated need as a result of fire fuel levels in the area designated for the burn. Prescribed burning to meet a set of external planning criteria must be avoided.
    - These prescribed burning plans must be noted in the SBMP as indicative only and subject to weather conditions, fuel load and vegetation response to previous fires.
    - All planned fires must be the subject of ground truthing of fuel levels before plans proceed.
- Given that some designated inter-fire intervals for vegetation recovery extend to over 40 years, there should be a long term commitment in the SBMP that

these fire intervals will be respected in future plans, and that prescribed burning plans will not simply repeat this 10 year plan.

- The prescribed burns as set out on the map appear to bear little relationship to time elapsed since the 2003 fires. For example, burns scheduled to take place in the Blue Gum area on the Tennent for 2017-19 carry vegetation seriously burnt in the 2003 fires and set out as requiring 21-41 years for recovery between burning so these areas will be burnt well before the vegetation has had a chance to fully recover.
    - The burn plans should ensure the designated inter-fire intervals for vegetation recovery take into account fire damage from the 2003 fires.
- Areas marked for prescribed burning on the maps are too large for example in Blue Gum Creek and on Stockyard Spur. We understand that this is because of a lack of access or natural advantage lines which could be used to halt the burn. We would suggest that this is not sufficient cause to burn an area – because a prescribed burn can't be stopped. A lot more scientific work needs to be done on what would be burned in these large areas and more detailed plans for control of the proposed burns need to be put in place for targeted and controlled burns to minimise the ecological damage.
- The Blue Gum area map is worrying because it is such a large area, with a diverse range of vegetation including rare species such as E. cinerea triplex; in fact, because of its isolation, comparatively little is known about the range and distribution of this species and the fauna of this area, including birds. In addition the topography is extremely difficult and there is a serious danger that prescribed burning activities could escape control and do significant ecological damage.
    - Another area, perhaps Bushfold Flat, should be identified to fill the fire advantage role currently assigned to the Blue Gum Creek area.
- Plans to burn off Stockyard Spur also appear to be largely theoretical rather than practical. We are a little shocked at the extent of the proposed burn, again because of a lack of natural or man-made fire boundaries but the area has such economic and environmental significance any prescribed burning plans should be kept to the barest minimum.
    - The area adjoins Ramsar listed wetlands, not just the Ginini site but also Cheyenne Flats and Snowy Flats. Small areas of sphagnum moss and peat are also scattered through the area and many of these did not burn in 2003, increasing their importance to the healthy state of the area.
    - The topography of the area includes steep slopes covered by loose gravel and the burn plan involves burning to the Cotter River, i.e. burning down these steep slopes before the fire can be arrested. The primary concern for land managers in this area should be conserving vegetation cover on steep slopes to prevent erosion and landslips, not burning it simply because a fire cannot be stopped anywhere else.
    - Thirdly, the wide variety of vegetation types includes snow gum woodland, alpine ash, mountain gum, candlebark, E. dives and mountain ash. These do not exist as separate stands which can be cordoned off during a prescribed burn but intermingle so that a fire plan

would not be able to discriminate between different species and their response to fire.

- The plan to burn off Stockyard spur twice in the 10 year period covered by these maps is not acceptable. The second burn, coming so closely after the first one, would kill fire sensitive species and alter the vegetation across the area including on the dry steeper slopes above the Cotter River. This change in vegetation following the second burn would be likely to cause erosion and even landslip in severe storm events. Further, the repeat burn five years later, into an area still affected by the previous burn, would carry an unacceptable level of risk of fire escaping into Ramsar listed wetlands and key water catchments.
    - The plans for prescribed burning off Stockyard Spur should be severely reduced and the second burn of Stockyard Spur must not be included in these plans.
- The plan to re-burn Potters Hill (2019) just barely falls within the designated inter-fire intervals for vegetation recovery. As Potter's Hill is the first prescribed burn carried out after 2003, this is the only place where we can test the plan's commitment to protecting environmental values by respecting the inter-fire intervals specified on the map. This gives the unfortunate impression that these fire intervals will play only a nominal role in deciding the timing of prescribed burns. We suggest this burn be pushed back further to allow sufficient time for recovery of vegetation following the initial prescribed burn in 2007.
- We cannot be sure that the burn plans have taken adequate account of all known heritage sites. Significant heritage sites are missing from the maps we have seen including rock art, stone tool sites, boundary markers and drop log fencing. The plane crash site off Smokers Fire Trail is a further example and even Mt Clear campground is not marked.
- There are several anomalies on the roading plans with road classifications being upgraded in areas which have no possible access for the heavier equipment which would use these sections. Brandy Flat Road is a good example.
    - We suggest a consistent road grading between access points would be sensible.
- Roading as marked on these maps is not accurate. In the Gudgenby Bush Regeneration area, mapped roads have been closed and re-planted and roads which have been recently graded are not shown. The Long Flat fire trail is not accurately marked and we note concerns about the current route remaining open below. In addition we note a proposal to upgrade a road in the Hospital Creek area which has not previously been mentioned.
- The Gudgenby Bush Regeneration area should be marked for exclusion of fire for at least the next ten years to protect newly planted trees and allow sufficient time for the understorey to return.
- There are no references that we can see to the use of walking tracks in difficult areas such as Nursery Swamp to Rendezvous Creek, as possible entry or escape routes for remote area fire crews
    - Walking tracks should play a role in fire access and safety and where appropriate, should be marked so as to allow use in fire conditions.

- The ecological burns proposed for grassy areas such as the Northern Orroral section of the map, need to be colour coded separately to the other prescribed burns to avoid confusion.
- The plans to burn the lower (western) Grassy Creek area have significant areas where the risk of fire ignition and spread are rated as possible, rare and unlikely and hence do not correspond to the stated aim of allocating prescribed burning to areas which have a high risk of ignition and spread. It is possible these are 'public relations' burns, done to placate NSW neighbours in which case the plan should state the real reason.
- We note that the original Grassy Creek fire trail is retained and upgraded, despite the fact that a new fire trail has been built, ostensibly to keep vehicles out of the riparian zone. A similar situation exists on Long Flat.
    - Where a fire trail has been replaced because it presents a threat to a riparian zone, it must be closed and revegetated, not upgraded.
- There must be reference throughout the documents of the Strategic Bushfire Management Plans, including the maps, to ongoing and adequately funded monitoring and assessment to guide sustainable fire management practices.
- We note a possible error in the legend for the designated inter-fire intervals for vegetation recovery which has a minimum for the mid green areas of 21-40 years and a maximum of 11-40 years.
- In summary, we note the omissions, errors and assumptions in these plans mean that they cannot be given the same statutory status as the rest of the Strategic Bushfire Management Plan and must carry a note that they are indicative only and subject to regular review and revision as more accurate information on vegetation and fauna, fuel loads, fire fighting assets and fire risks are developed and better strategies for sustainable fire preparedness are identified.

We hope these comments are useful and look forward to further consultation on the northern section of Namadgi.

Yours sincerely

Christine Goonrey

President

13 May 2009

Attachment C

Comments on Northern Namadgi fire management maps.

General comments:

1. There are a lot of roads still being maintained in ex-forest areas which will lead to erosion, increased risk of arson and continuing illegal vehicle use. There needs to be a long term plan, based on broad management objectives, not just fire management, for maintaining only those roads essential for management purposes. Over the ten year period covered by this plan, public access should slowly be reduced and all other roads closed, particularly those in riparian zones and those which duplicate roads within a few hundred metres of each other.
2. There is much greater need for recovery and revegetation plans following prescribed burns in areas moving from pine plantation to native vegetation. It is much cheaper to protect wild native seedlings which are establishing themselves in most of the ex-plantation areas, than to destroy these and be forced to hand plant or re-seed.
3. On the other hand, prescribed burning offers an opportunity to seed into the warm ash beds, a method or re-seeding which proved highly successful in the Gudgenby Valley.
4. More use should be made of well-placed walking tracks particularly in difficult areas in Tidbinbilla, for remote area access and escape.

Umbarra

- Woodstock reserve was badly burnt in 2003 and not recovering very well but there is a burn planned for 2015. It is a dry, south facing slope close to a recovering riparian zone so this would need to be reviewed closer to time.

Cotter Dam

2009 tranche

- North of Thompson's Corner appears to be a plan for a hot burn to get rid of wildings but there needs to be a revegetation plan for such a steep slope in the Cotter catchment and measures should be taken to protect eucalypt seedlings which have appeared among pine wildings. Note the experience with the Gudgenby Bush Regeneration Group with the success of re-seeding back into the warm ash beds.
- The 4 blocks to the east in the old pine forest have the same problem – burn plans should protect existing native vegetation and include recovery plans for returning areas to native vegetation after the proposed burn.
- We would expect that the pines will have very low branches as they will not have been trimmed as would happen in a managed forest and so have the potential to provide the 'ladder' effect so burn plans would need to be identify how this effect would be mitigated.
- Paddy's River Road: no comment
- Brindabella Road above Blundells Flat: have to prevent the prescribed burn impacting on the alpine ash seedlings across the road.

2011-2013 tranche

- North west of Uriarra Station holds e. macrorhyncha; the woodland area would need to be restricted to only a light mosaic burn. We note that the

prescribed burn is to set scene for grazing as fuel control and this should be monitored carefully as to its effectiveness.

- South of Condor Creek: some new pine and old pine areas presumably also planned for a hot burn to get rid of wildings but again the revegetation plan for such a steep slope in the Cotter catchment needs to be a priority The burn plan should also include measures to protect eucalypt seedlings and established native re-vegetation. Again, note the experience of the Gudgenby Bush Regeneration Group with the success of re-seeding back into the warm ash beds.
- Warks Road: partly in/partly out of Namadgi, west facing slope, drier and more open with E. dives and rubida.

2013-2015 tranche

- Blundells Creek Road: alpine ash and tall forest ecosystems so care needs to be taken to ensure a cool mosaic burn.
- West of Vanity's Crossing: no comment
- Bullen Range: no comment

2015-2017 tranche

- East of Cotter River and Pipeline road is an area of dry forest, presumably planned for a prescribed burn to stop fire getting into Tidbinbilla Range and Hardy Range. We have serious concerns about erosion if the prescribed burn is hot along Pipeline Road.
- Murrays Corner area is very steep; care needs to be taken to prevent burns ending up in Paddy's River. We note this is a joint management area requiring the private leaseholder's agreement.
- Wombat Creek: the west facing slope is steep and slow to recover from fire so care should be taken that there is sufficient fuel to justify a prescribed burn, especially given our concerns about soil stability in this area.
- Blue Ridge/Mt Blundell block contains tall forests of E. viminalis and E. Radiata and is very steep; we support hot fire in south-west corner to eradicate pines but have concerns about soil stability across the block as it is still in the Cotter catchment.

2017-2019 tranche

- Condor Creek: no comment
- Thompsons Corner/Wombat Creek is very steep, with a high potential for erosion. Again, care should be taken that there is sufficient fuel to justify a prescribed burn, particularly as there are large areas of bare earth and rock.
- Pabral Road: steep; we support keeping fire out of the NSW area across the border because it is areas of high conservation value.
- Paddy's River/Bullen Range is steep, dry, slow to recover after fire and care should be taken that there is sufficient fuel to justify a prescribed burn.

<u>Tidbinbilla Map</u>

2011-2013 tranche

- It seems a bit extreme to clear 30 metres around then koala enclosure in Tidbinbilla, particularly as the surrounding area is tall forest.
- The north end of Stockyard Spur has scree slopes which are difficult to burn across and highly erodible. We would repeat comments made at southern Namadgi consultation: this area shouldn't be burnt twice in 10 years.
- Nil Desperandum block causes concerns about erosion on boundary track on west side of Tidbinbilla block.

- Bendora Dam: no comment

2013-2015 tranche

- Moonlight Hollow/Warks Road: no comment
- South of Gibraltar Creek the ridges are very steep, dry and highly erodible. Along with Blue Gum burns (Tennant map) this will make a huge swathe of burnt area. Burn plans have to protect the hilltops south of Gibraltar Ck which contain the only occurrence of E. sieberi (Silvertop ash) in the ACT.
- It is hard to understand what the purpose of the Fishing Gap car park burn might be.

2015-2017 tranche

- Old Block 60 has some moist gullies; other parts are badly burnt old pine forest which is re-vegetating. It is important to put in place plans to protect natural vegetation which is establishing itself. We have doubts that the re-growth will be old enough and big enough to survive a fire. Some areas are still bare and rocky. Again, note the experience with the Gudgenby Bush Regeneration Group with the success of re-seeding back into the warm ash beds.
- Mt Eliza/Gibraltar Peak is highly erodible, dry and slow to recover after fire. We have concerns that it will only just be recovering from the 2003 fire.

2017-2019 tranche

- Bendora Trig area has very diverse ecology, high ridges and slopes down to Cotter River; it is steep on the south and eastern sides, also wet forest and dry open forests on the other side. We have concerns about how this diversity will be taken into account in a prescribed burn.
- Reed Creek/Tidbinbilla is steep, wet, with a range of diverse vegetation and is a well known habitat for lyrebirds so requires a very careful burn plan.
- Devils Gap Peak is similar to Mt Eliza: highly erodible, dry and slow to recover after fire. We have concerns that it will only just be recovering from the 2003 fire. In addition it has lots of weeds and extensive blackberry infestations.

Attachment D:

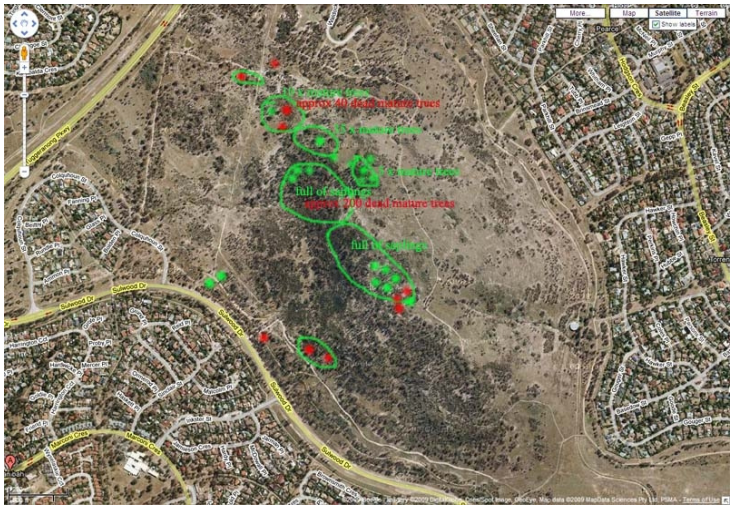
Urban Nature Reserves: comments on SBMP mapping 2009

General:

- Grasslands: Most grassland nature reserves (and other areas (eg Majura Firing Range, Barton) are habitat for a wide range of grassland specialist animals, which in turn are dependent upon invertebrates for food, tussock structure for shelter, and artefacts such as spider burrows (Earless Dragon) and soil cracks (Striped legless Lizard) for homesites. As we know fire frequency is being informed by plant reproductive intervals. In these fauna cases we also need to include animal population health (including their food items). We do not know enough to guesstimate frequency intervals for these species yet (unless the Uni of Canberra research is showing results). Given the impact of kangaroos, drought etc populations are likely to be at a low ebb (as will grass biomass). But fire frequency should address recovery of these endangered species. Fire plans should also include no more than (say) 20% of any one grassland area burnt at any one time period. We only have a few areas left, we can't afford to burn the majority of any of them, as dispersal capabilities of the species involved are not significant, and the fragmented nature of remaining grasslands presents an enormous barrier to movements. (D Shorthouse)
- Weeping Grass will not be impacted by fire, even hot fires. Land being kept clear of shrub and tree growth, even with occasional burns, will promote the growth of Microlaena. It will spread readily on more fertile and moister soils. It will even gain a hold (and spread) on less fertile land and slopes that are clear of other than grassland competition (other than vigorous introduced grasses). The main issues associated with burning grassy areas on less fertile soils on sloping land is the complete clearance of the biomass, exposing for a time the bare soil. Fire can bare the soil in the same way as an overabundance of any grazing animal, native or domestic. It is under these bare soil conditions that the topsoil, as little as there often is, is exposed to runoff during rain periods, and wind removal when dry. The effect is to leave small raised hummocks where the grasses are growing, with inter-tussock spaces eroded down to hard substrate. It is immensely difficult for seedling to then re-establish in these spaces. When the land is like this, it is highly beneficial to allow ground storey plants to grow without being grazed or burnt, so the soil is protected from heavy rain and wind. Fires will impact on seed production and seedling establishment if undertaken at the wrong time.
- I would suggest that occasional cool mosaic burns on the interface will have very little impact on established clumps of Microlaena, and may even promote the species.
- In my view the impacts of prescription burning on soil microfauna/flora are not well known enough within the fire/fuel management groups. It is difficult and costly to monitor, so while they are aware of the issue, I think it is given a low priority when planning management programs. However, low intensity mosaic burns will have much less impact than a widespread hot burn. Again, it is not the immediate burn that has all the impact. The soil zone where a considerable percentage of the micro fauna/flora exists is in the organics of any topsoil. If this is washed or eroded away by wind, the impact is again as explained above.

- I agree that the land managers should be aware of the “special” areas where more care should be taken. (Geoff Butler)

Mt Taylor

- Casuarinas: On this map of Mt Taylor the green dots represent mature trees (but not all of them), the red dots are dead (burnt 2003) mature trees. The green circles show areas full of saplings. So all up, conservatively, 60 mature trees, 250 dead (burnt 2003) mature trees and thousands of saplings, ranging from 50cm-4m. I only saw 3 saplings of about 3-4m that I thought had new cones on them. The scale down at bottom-right of the map is 200m so I guess about 10 hectares of coverage. There are also some trees on the new track on the east face. (Matthew Tunks? Though J Bounds)
- 

Black Mountain:

- Biodiversity: Black Mountain is unique and has provided an incredibly valuable laboratory for nearby research establishments of ANU, CSIRO, Botanical Gardens and UC. Seminal research on ants, sex life of orchids/insects and the impact of powerlines through reserves has been based on Black Mountain. Black Mountain (including its Ridges and Aranda Bushland) is a biodiversity hotspot with the oldest soils in the ACT and a different mix of plants and soil biota. There are about 500 plant species and the orchid count is 60 species (compared with 103 in the whole ACT). The soils are Ordovican and Silurian with the Deakin Fault (which goes more or less down Bindubi Street) dividing it from the Mount Painter volcanics. I reckon the early settlers worked this out - Mount Painter had good soils for grazing and Black Mountain/Aranda Bushland was only good for fence posts and wood for burning. Mount Painter may have had more trees than today, but the differences were probably as obvious from a distance as they are today. Professor Lindsay Pryor's 1938 ecology map shows Black Mountain complex as the major patch of Scribbly Gum - Red Stringybark in the ACT. The remaining Scribbly Gum - Red Stringybark in the ACT is narrow strips along contour lines in the Brindabellas. Black Mountain has Grevillea alpina (the northern most occurance) while the other hills have Grevillea lanigera. The Daviesia species (Egg and Bacon peas) also differ and CSIRO piecharts show surprisingly different soil biota. (J Gueue)
- North end of Dryandra St (2011-2013) (2) (first burn between 2011 and 2013); 2nd burn before 2019 (TBA) That area is pretty grassy, so probably warrants a

burn frequency of say minimum 4-5 years, max time between fires about 10 years).

- The area to be burnt twice to the north-west of the junction of McArthur Ave and Dryandra St is presumably to protect the caravan park there, with the whole area to be burnt twice within the 10 year period. Areas here which are the native grassy low open forest warrant a minimum of 10 years between burns. Recommend splitting the area into two partial burns in the 10 year period to protect both native grassy low open forest and caravan park.
- The area at the end of Frith St looks as though it's designed to protect the ACTEW station and possibly Botanical Gardens facilities; would be worth checking what the northern boundary of this burn area is: logically it would be south of the creek line that lies behind the Botanical gardens area and east the fire track adjacent to the ACTEW station. The area adjacent to the Botanical Gardens facilities is very weedy - I'd have no problems with it being burnt twice (ie the area south of the creek).
- The area at the top of Black Mountain around the tower and carparks: definitely concerned if they're proposing to burn the whole areas twice; minimum interval between successive fires must be 10 years here.
- There's a strip shown at the northern end of the arboretum where they've got a (5) after 2008-2009! They can't possibly be talking of burning the same area five times in 2 years (even tho' I don't think there's any native veg there) - suggest clarify.(Rosemary Purdie)

Aranda Bushland

There are three locations needing to be exempted from burns in the Aranda area:

- Pryor's Snowgum. Scheduled ancient snowgum, over 400 years old. Located inside the new Glenloch Interchange, scheduled to be burned 2015-2017. Ref 35 degrees 16 minutes 05.58 seconds S; 149 degrees 05 minute 03.46 seconds E
- Black cypress clump near the power lines crossing Aranda bushland, scheduled to be burned 2017- 2019. Ref 35 degrees 16 minutes 05.58 seconds S ; 149 degrees 04 minutes 47.14 seconds E
- Clump of Golden Moth orchids, near Bindubi St below the power line crossing, was burned 2007, not currently scheduled to be burned. Ref 35 degrees 16 minutes 05.37 seconds S ; 149 degrees 04 minutes 31.61 seconds. E (I Falconer)

Latham Grasslands

- Most of the area coloured blue that is in the southwest corner of the suburb between Denny Street and Florey Drive is desperate for a burn or other defoliation (the Themeda is well and truly smothering itself). However, there was some arson in this grassland in March 2007 and with the dry spell being what it is this area has yet to recover (there is about 50% bare ground). Also the north west corner of this area doesn't seem to have recovered since the last regular burn which was quite a few years ago (once again this is probably due to the dry spell). If at all possible I'd like these areas left alone for a while. The 2007 arson was pretty much smack in the middle of the blue area and stretches from the north west to the south east (it is about 100 metres long and from 20 to 50 metres wide).

- The areas on the right bank of Ginninderra Creek that are scheduled for burns and the area near Macrossan Crescent similarly are desperate for burns.
- Although it is mid winter the nodding chocolate lilies (Dichopogon fimbriatus) and bulbine lilies (Bulbine bulbosa) have put up leaves so any burn at the moment might set these back a bit. But countering this, the wild oats is coming along nicely and a burn might set these back a lot. This is a long winded way of saying that a burn at this time of year would be a mixed blessing and I'm not sure whether it would be a good or bad idea. My records show that the last controlled burn in this area was conducted in October 1994 so I suspect I am worrying unnecessarily about the lilies (since then the burns have been arson - the most extensive of these was in June 2000).
- I'm perplexed by the idea that the areas behind Solomon Crescent and the northern end of Denny Street will be burnt 5 and 3 times respectively. These areas are, I understand, rated as very high fire risks because of the slope of the land and the back fences of the houses facing north or north-west, which probably explains the proposed regularity of burns. However, when the area behind Solomon Crescent was burnt in about August 2006 the Themeda bounced back quite quickly (ie the burn affected the quantity of fuel for a very short time). The only adverse impact that might come from burning this often is that the Themeda might be supplanted by spear and wallaby grasses or weed species like African love grass and serrated tussock. Robert Cruickshank)

The Pinnacles

- For the Pinnacles there have been several fuel-reduction burns in the last two -three years in the Stringbark forest & on the forest's eastern edge. Elsewhere the roos & rabbits have reduced fuel but they still burnt around the bases of trees & even a Dianella patch.
- Even though the Pinnacle is a nature reserve it appears that their plans would suggest that more attention is paid to the proximity of valuable real estate than the biodiversity & soil condition of the forest.
- Isn't there a limit to the positives of burning (ash & smoke) if there is a loss of the layers of micro-fauna & fungi that are recycling leaf-litter?

Mt Rogers (Rosemary Blemings)

- This area used to be classified as Urban Open Space & in the past I, as Convenor of Mt Rogers Landcare Group & one of hundreds of people who have an interest in the area, have liaised with Steve Amos on management issues. Observations over the past 15-20 years reveal that Mt Rogers was woody-grassland and grassland which has been 'pasture-improved' in relation to its previous role as grazing land. Plantings of native trees & shrubs occurred >35 years ago when the suburbs were built & infrastructure was installed. It is not an area grazed by kangaroos.
- Currently there are open areas introduced grasses, including oats & a range of herbaceous weeds, areas of quality grassy woodland with understoreys of shrubs and grassland forbs & shallow 'leaf-litter' build-up, residual areas of native grassland with a range of endemic species,plantings (2000 - 2009) of local native tree & shrub species that complement gradual regeneration of similar species.

- One area proposed for burning under the plan is west of houses in Woodger Place, Fraser. *It should be placed on record that, although tiny, this is the most complete & biodiverse area of grassy woodland on Mt Rogers even though it is fringed by African Lovegrass infestations introduced by mowers.*
- My particular concern relating to Mt Rogers is that, to my knowledge, there has been no assessment made of the area's vegetation & biodiversity values other than the notes & species list our Group has compiled over the years. It would seem unscientific to risk destruction of species by fire before the existence of those species has been established & recorded.
- It is possible that the "fuel-load" created over time by bark, branches, leaf-litter is functioning quite adequately as it is in breaking-down these materials through microbic & invertebrate action. Fire might destroy the current balance in this regard & cause set-backs within the biodiverse-areas which are already facing 21st century challenges.
- Dieback or other causes claim 35+ year-old trees quite regularly. Regeneration & our small plantings are attempting to redress this issue.
- One area proposed for two burns in 10 years admittedly hasn't been burnt for decades. Three houses abut this area. It also is the most intact - healthy example of grassy-woodland on the whole site with Bulbine lilies, Chrysocephalum X2 , Wormbea, native grass species, even a residual Indigofera adesmiifolia, lomandra sp, Grevillea, Hibbertia.
- For other areas of Mt Rogers it's been quite noticeable that *Microlaena* is reclaiming many areas & not just damper, shadier places. It would be a huge tragedy if fire were to be used on open grassy areas & destroy all this progress. I can understand & would support measures against oats, phalaris which do excell with rainfall & do provide fire-material in summer (because there are no kangaroos there to eat it).