



## Executive Summary

At its 20 October 2014 Ordinary Council Meeting, the Council passed a resolution requesting an appraisal of options available to further protect canopy trees in the Whitehorse municipality. This paper was tabled for discussion at the 8 December 2014 meeting.

The purpose of the paper was to explore what interim controls and measures were available to Council, what other Councils are doing and the resource implications of applying further controls.

The paper, titled Options for Tree Protection (the paper) outlines the approaches taken by the City to date to protect its trees and significant vegetation in the face of increasing urban density in Whitehorse. It suggests that upper canopy trees and significant vegetation are generally well protected in the City. This claim is supported by the enumeration of the statutory planning controls and local policies such as Tree Conservation which have been enacted in the City to protect the treed canopy.

The paper concluded there were three strategies available to local councils to protect trees:

- Enact statutory planning controls such as overlays and schedules to the residential zones to protect canopy trees on private land
- Develop a local policy to protect and regenerate trees in the local planning scheme, including reference to protection of trees and vegetation through neighbourhood character and housing policies to protect areas with (significant trees) from the level of development which would remove them
- Develop a local law with penalties for the removal or lopping of trees on private property.

The paper notes that Council has enacted options 1 and 2. It concludes by recommending that Council note this report and refers the preferred option of statutory planning controls and local policies to further consideration in the 2015/16 budget planning process, noting that a planning scheme overlay is the preferred control. It also recommended that Council write to the Government and other political parties expressing concern at the low financial penalties in place for illegal vegetation removal and requesting increased penalties and write to the Minister of Consumer Affairs requesting that all tree loppers be required to obtain a trade licence.

This submission from WERA supports the proposed approach of applying additional statutory controls for the protection of canopy trees and their restoration as the preferred approach. It supports the effort of Council to incorporate greater tree protection provisions within the statutory planning zones, although it argues for a review of the current emphasis on protecting the neighbourhood character of bush or native vegetation at the expense of the English and exotic vegetation pre WW2 and the suburban character post war from the 1950's to the 1970's where single dwellings were sited in relatively large garden allotments with extensive tree canopy, vegetation and private open space.

We argue that the proposed NRZ schedules, for example, provide lower standards for site coverage, site permeability, planting of upper canopy trees and setbacks to exotic trees and gardens in NRZ5 than those applying to the other NRZ designated zones. This is because the application of the NRZ falls disproportionately in the eastern precincts in bush suburban and bush environment where Australian native plantings appear to be valued more highly and have enjoyed higher statutory protection for some years. As a result these areas have experienced less intensive development, have retained a majority of single dwellings and associated gardens and find it easier to argue for their retention as the dominant landscape character in the area.

We also suggest that the proposed schedules for NRZ 5 are not consistent with the site requirements for planting of large exotic upper canopy trees and extensive exotic traditional gardens consistent with the more traditional English style of heritage housing. Since the majority of trees in the western precincts are on private land the more limited protection of significant trees and heritage lots fails to address the progressive destruction of the upper canopy tree private and public asset.

To address these issues this submission proposes that the protections for trees and vegetation in the Garden Suburban precincts in the west in General Residential and Neighbourhood Residential Zones need to be reviewed and further enhanced.

In addition, this submission argues the case for a fundamental re-orientation of Council's current approach to tree protection, which ties canopy tree protection to neighbourhood character or to individual significant trees under Vegetation Protection Overlays.

Despite the Council's tree education program, the environmental and community health aspects of tree canopy are not being addressed in the current approach to statutory planning controls on trees.

The tree canopy as a whole is not measured, benchmarked, valued or monitored as an environmental community asset.

To address this issue requires rethinking our concept of trees and landscapes worthy of protection as primarily native Australian trees and vegetation or individual significant trees and protecting all trees as contributing to a canopy cover whose value rests in its coverage across the municipality and its capacity to mediate the effects of climate change on urban environments.

This will require applying tree protection provisions more widely and more broadly in the context of an urban forest strategy which is underpinned by the application of data on the extent and health of the current tree canopy across the City. This data is now available readily and cheaply through open access GIS-based approaches to managing urban tree canopies through applications such as iTree.

This paper provides a commentary on the Tree Options Proposal delivered to Council and outlines a series of recommendations to better protection the tree canopy especially in the western precincts of the City.

### **Statutory planning protection: residential planning zones and schedules**

- **Residential planning zones and schedules**

The application of residential zones is grounded in neighbourhood character studies and the housing strategy. Together these strategic policies direct where intensive, moderate or limited urban redevelopment and densification occurs in the city. The application of the zones and their schedules has a significant impact on the retention and/or replacement of upper canopy trees and local vegetation when sites are redeveloped. Where development dominates the site, surfaces are impermeable and lot sizes small, it is almost impossible to retain or plan the large upper canopy trees and well vegetated front, side and rear gardens. The impact is negative whether the site is redeveloped with a single dwelling which is only required to meet ResCode requirements or where the site is sub-divided into small lots possibly with double-storey dwellings which similarly are only required to meet the ResCode requirements.

As urban density and infill development has occurred progressively across Whitehorse there have been very limited statutory controls available to local planning authorities to protect the natural environment which is a significant element of local neighbourhood character. Rather, it is easier to require a response to neighbourhood character in relation to built form and possibly scale as this is more compatible with medium and higher density infill urban redevelopment.

So it is interesting that the key features on which neighbourhood character is categorised across Whitehorse are the local trees and vegetation in the neighbourhood and the extent to which they are considered to be a dominant, valued and significant feature. The result is three neighbourhood character typologies: the Garden Suburban (largely exotic trees and vegetation), Bush Suburban and Bush Environment.

In general, statutory protection for bush suburban and bush environment precincts is higher than for garden suburban precincts in relation to site coverage, minimum lot size, site permeability and setbacks. This protection is achieved through the application of residential zones and their schedules.

The Naphthine Government reformed the residential zones and directed Councils to apply them consistent with their neighbourhood character and housing strategies.

- **Application of the new residential planning zones in Whitehorse: the NRZ and its schedules**

Whitehorse Council undertook a review of these strategies and a community consultation strategy concluding with a submission for a planning amendment to incorporate the new zones and amended schedules consistent with state and local policies. Whitehorse Council translated its current limited change zones to the new Residential neighbourhood zone and developed schedules for the 5 NRZ precincts consistent with their neighbourhood character. Generally site coverage, permeability, setbacks and requirements for the retention or replacement of upper canopy trees is more generous for bush suburban and bush environment character precincts. There are 2 proposed NRZ in the western precinct. The area protected by a significant landscape overlay north of Belmore Road is so protected and classified for limited change because of its Australian native canopy trees intermixed with more exotic gardens. Statutory controls in this area are more stringent in respect of trees and vegetation than the area to the south of Belmore Road regardless of the extent and the upper canopy tree cover, the number of single dwellings and the set back of houses within surrounding exotic gardens. The critical element appears to be the native trees.

NRZ 5 in Mont Albert has less stringent site coverage and tree protection requirements unless individual significant trees are subject to a Tree Protection Overlay despite there being more heritage overlays in this zone than in the rest of Whitehorse.

The majority of NRZ areas are located in the middle and eastern precincts characterised by Bush Suburban or Bush Environment. However, over a quarter of all the heritage overlays are in the west and many of these should also include protections for the traditional garden and canopy trees which characterised the earlier settlement and urban design in the former City of Box Hill.

An advisory panel to the Minister for Planning is currently reviewing the proposed schedules for the NRZ in Whitehorse. WERA has made a submission to the Advisory Planning Panel that the proposed schedules for NRZ 5 should be consistent with the other NRZ precincts. Having the same requirement for site permeability and coverage as the other NRZ would enable the upper canopy trees in these precincts to be protected and/or replaced.

In addition to the NRZ and its schedules, Council may apply overlays such as a significant landscape overlay or vegetation protection overlay. To date it has not applied these in the western end of the city except for the area north of Belmore Road which is Garden Suburban but contains a large number of native trees.

#### **Application of tree and vegetation protection overlays**

Despite the paper's assertion that canopy trees and significant vegetation have effective statutory protection, those planning amendments which have introduced such overlays and attempted to strengthen statutory protection for canopy trees have had limited application and impact in the west of the municipality which is mostly Garden Suburban in character.

#### Amendment C57

Amendment C57 sought to implement recommendations contained in a 2004 review of the Whitehorse Neighbourhood Character Study. The Amendment proposed to:

- Introduce a new schedule to the Neighbourhood Character Overlay (NCO2) and apply the overlay to an area in Box Hill;
- Introduce a new schedule to the Significant Landscape Overlay (SLO8) and apply the overlay to areas in Mont Albert North and Vermont; and
- Extend Significant Landscape Overlay 2 (SLO2) to two areas in Blackburn/Nunawading.

Accordingly, this VPO was incorporated in the local planning scheme through Amendment C60 which was designed to implement the outcome of the Council's **significant tree study** and apply the new VPO to this area.

#### Amendment C60

The Amendment sought to implement the outcomes of the Whitehorse Significant Tree Study undertaken by Whitehorse City Council over a number of years. The Amendment sought to undertake the following;

- Apply a Vegetation Protection Overlay (VPO) to individual properties within the municipality on a permanent basis;
- Amend the Vegetation Protection Overlay and a Schedule to the Vegetation Protection Overlay (Clause 42.02) to establish a permit requirement to remove, destroy or lop any vegetation included in the report 'City of Whitehorse- Statements of Tree Significance- 2005' (the 'incorporated document') on a permanent basis;
- Include the updated report *City of Whitehorse- Statements of Tree Significance - 2005* as an Incorporated Document in Clause 81.

The relevant Planning Panel found that Amendment C60 should be adopted with some modifications. It agreed to:

- Amend the Vegetation Protection Overlay and a Schedule to the Vegetation Protection Overlay (Clause 42.02) to establish a permit requirement to remove, destroy or lop any vegetation included in the report 'City of Whitehorse- Statements of Tree Significance- 2005' (the 'incorporated document') on a permanent basis;
- Include the updated report *City of Whitehorse- Statements of Tree Significance - 2005* as an Incorporated Document in Clause 81.

### Amendment C83

This Amendment proposed to introduce the Vegetation Protection Overlay (VPO) over 548 individual private properties in the City containing trees assessed as being of significance. The trees were identified and assessed as significant in the second phase of the Council's municipality-wide Significant Tree Study.

The Amendment also proposed to remove an existing VPO1 from 29 other properties where vegetation was no longer present.

All statements of significance for the individual trees or stands of trees were included in an updated *City of Whitehorse- Statements of Tree Significance - 2006* report which was proposed to become incorporated into the Planning Scheme.

### **Overlays**

The Council paper notes that since the current state-wide planning scheme was introduced in Victoria, Whitehorse has resourced the development of:

- Four Vegetation Protection Overlays - two with Statements of Tree Significance for individual sites; two being wider area-based;
- Eight Significant Landscape Overlays;
- Two Neighbourhood Character Overlays;
- Two Environmental Significance Overlays, protecting specific classes of vegetation communities
- The Heritage Overlay – nine places have tree control triggers

These overlays are generally focussed on the eastern precincts with the single exception of Mont Albert North (North of Belmore Road). In general they tie tree protection to either a claim for an individual significant tree or for a broader area of environmental significance which warrants a significant landscape overlay. The bar is set relatively high for protection of upper canopy trees in Whitehorse: by preference they should be indigenous and set in a significant landscape with high conservation values.

### **Environmental Significance Overlay**

ESO 1: 131-173 Central Road, Nunawading

### **Vegetation Protection Overlay**

VPO 1: Significant Exotic, Native and Indigenous Trees

VPO 2: Significant Exotic, Native and Indigenous Trees – Mont Albert North (north of Belmore Road)

VPO 3: Significant Exotic, Native and Indigenous Trees

VPO 4: Significant Exotic, Native and Indigenous Trees – Mitcham South Area

### **Significant Landscape Overlay**

SLO 1: Blackburn Area 1

SLO 2: Blackburn Area 2

SLO 3: Walker Estate

SLO 4: Blackburn Early Settlement Neighbourhood Character – Vegetation Retention

SLO 5: Nominated Large Sites: 1 Lake Road, Blackburn, 57-67 Central Road, Blackburn and 131-173 Central Road, Nunawading

SLO 6: Yarran Dheran, Somers Trail and Collina Dell

SLO 7: Vermont (Glenburnie Road and Environs)

SLO 8: Vermont (south of Canterbury Road)

SLO 10: Menin Road Area, Forest Hill (south of Melbourne Water Pipe Reserve)

You will note that most of these overlays relate to the bush suburban or bush environment precincts in the middle and eastern end of the City.

More recent planning amendments (Amendment C133 Environmentally Sustainable Development Policy and Amendment C130 Amendments to the Significant Landscape Overlay) which could have implications for tree protection, will not significantly impact on developments west of Elgar Road.

### **Effectiveness of current statutory controls**

The Council paper argues that this list of amendments indicates that there has been a significant investment in statutory controls in Whitehorse and, by implication, that these are effective.

However, the Strategic Planning reviews mentioned in the Council paper do not really address the effectiveness of the statutory controls in place on the retention or replacement of tree canopy cover across Whitehorse.

- **Strategic Reviews of the Whitehorse Planning Scheme**

In 2010 and 2014 Council was required to undertake a review of the effectiveness of its planning policy and processes. Apart from some technical issues with the application of the VPO it was noted that

- *There is often an issue just outside the area where a VPO applies as the removal of vegetation in these locations can sometimes be at a much higher level than within the area protected by the VPO. This can create a very obvious contrast in terms of the presence of vegetation between these two areas.*
- *Residents expressed the view that too much vegetation was being lost as a result of new development, particularly multi-unit developments. Not only is vegetation being lost but there is insufficient space provided in the new development for canopy trees to establish.*
- *It was also observed that trees on adjoining properties to redevelopment sites are also potentially affected by development - particularly increased hard surfaces such as driveways down side boundaries. It was suggested that these hard surfaces affect the root systems of the trees on the adjoining land.*
- *Residents felt that apartment style developments were not sufficiently contributing to the streetscape amenity of an area. The boundary to boundary development style often employed did not provide sufficient landscape area or area for large trees to develop. It was emphasised that this was particularly true of apartment developments with basement car parks. The basement structure, whilst sometimes set back from a side boundary, would still not allow a large canopy tree to grow. It was suggested that at a minimum far more generous front landscape setbacks were required. This would allow planting that would contribute positively to the streetscape.*

These findings suggest that the approach up to 2010 required improvement.

The 2014 review of the Whitehorse Planning Scheme recommended very minor clarifications to wording of the SLO and VPO, given the anticipated outcomes of the Housing and Neighbourhood Character Review that was in progress to reinforce landscape requirements in the planning scheme as the basis for the application of the new residential zones.

However, as noted above in relation to the introduction of the new planning zones and schedules, WERA is concerned that the very different approach to site coverage, site permeability and planting of canopy trees between the NRZ Schedule in the western end and the other 4 NRZ Schedules applied to the middle/eastern areas of Whitehorse will limit the effectiveness of this statutory control on removal of canopy trees and vegetation in Mont Albert, Mont Albert North and Surrey Hills.

- **Benchmarking tree canopy coverage**

In order to assess the effectiveness of the current statutory controls it is necessary to measure and monitor the tree canopy over time on private and public land as part of a tree protection or urban forest strategy which has as its general objective to protect and expand the canopy coverage across the municipality. This approach to tree protection is better styled as an urban forest strategy as it is designed to manage the urban tree canopy and vegetation as a total asset in order to meet agreed benchmarks and address the amenity, community health and climate change management effects of tree conservation in urban areas.

This approach is especially important for the western precincts as they have a much lower proportion of public open space than the eastern end and the contribution of trees on private land therefore plays a more significant role in maintaining neighbourhood character and amenity as a result of this fact.

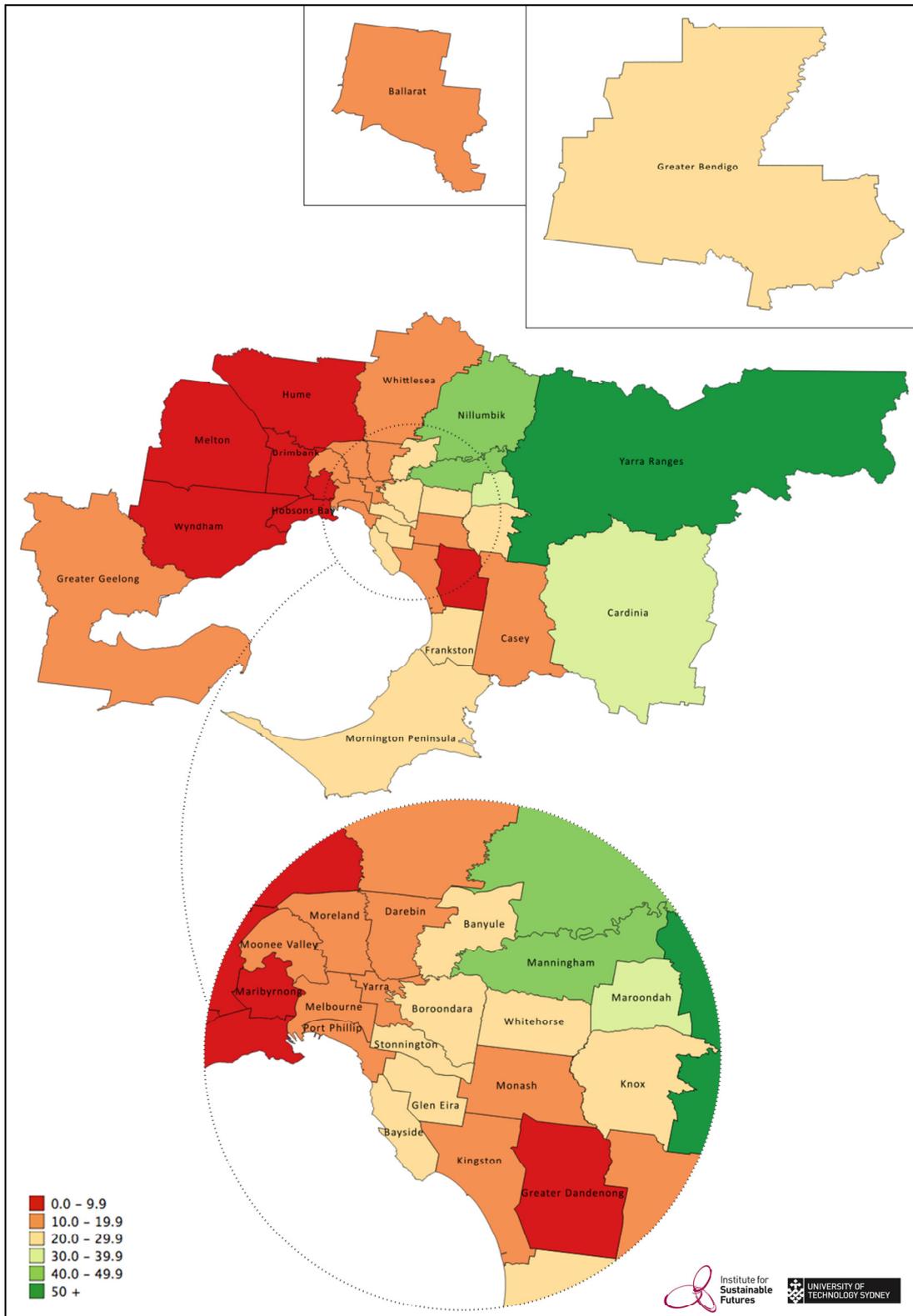
The City of Melbourne Urban Forest Strategy is an example of this approach although it is focussed only on trees on public land.

**Vision2020** is a national initiative designed to increase the proportion of tree canopy and vegetation coverage in urban environments across Australia. It uses an evidence-based approach to measure and monitor the proportion and health of the urban tree canopy and manages it as a significant public and private asset designed to mitigate the effects of climate change and contribute to community health and amenity together with wildlife conservation in urban environments.

The diagram below is taken from **2020Vision's** initial national benchmarking report on tree canopy and vegetation coverage in LGA's across Australia. The initiative aims to increase the proportion of coverage of tree canopy and vegetation by 20% by 2020. It illustrates the power of comparative data on tree canopy coverage across LGAs as the basis for assessing the effectiveness of statutory and other tree conservation initiatives and for designing new ones. The software is available to all government agencies as iTree through 2020 vision a national initiative to increase the proportion of tree canopy and vegetation in urban developments across Australia. It was developed using state of the art GIS mapping developed for the US Forestry Commission and which is available to all public sector bodies in Australia under the iTree branding.

It shows the relative percent (%) coverage of tree and vegetation canopy by LGA in Victoria.

Victoria Urban/Suburban Canopy Cover (%) by Local Government Area



The distribution of canopy is not surprising as it generally corresponds to density and the date of settlement as well as local environmental conditions.

Using this software it would be possible to map coverage across wards within a municipality and therefore establish benchmarks which can be used to measure the maintenance, expansion or decrease of canopy coverage over time. This approach has the advantage that it provides a broad assessment at a point in time across a wide area. This provides data on over time and space so that the progressive impact of site by site planning applications can be tracked.

- **Comparison with other municipalities**

The Council paper notes that tree-related overlays cover approximately 10% of the municipality. This is a relatively small proportion of the municipality and most of the overlays neglect the western precincts.

The impact of this restricted coverage will be the continued reduction of the tree canopy in unprotected areas of Whitehorse.

The Tree Options Paper examines tree protection two LGA's- Maroondah and Banyule which is an LGA with more in common with Whitehorse. The Paper notes that Banyule recently applied for and was granted an extension of its tree protection overlay **across the municipality**. The longer term impact of this approach is illustrated in the 2020Vision benchmarking report which compares tree canopy coverage for Banyule with Whitehorse. The City of Banyule has a higher proportion of tree canopy coverage (29.6%) than the City of Whitehorse (22.9%) while the City of Maroondah has approximately 35% coverage.

The Banyule and Maroondah examples suggest that a more- broad based tree protection overlay may be more effective in preserving and protecting the total tree canopy across the municipality than an approach which is limited to protecting individual significant trees or to bush or native species or environmentally significant areas covered by a significant landscape overlay.

The Paper notes that obtaining Ministerial approval to incorporate overlays into any planning scheme requires considerable technical supporting documentation to develop evidence to validate the need for an overlay and community consultation via the Planning Scheme amendment process. Generally, it takes some years of work and typically the Vegetation Protection Overlays from Council's Significant Tree Study have taken approximately 3 - 5 years to implement. (Although the Banyule application for a tree protection overlay did not require this sort of evidence at all). This is not, of course, a reason not to escalate this type of work given the activity occurring in other municipalities and the economic capacity of Whitehorse to fund this program.

Council has not invested in heritage or tree protection work in a significant way compared to others and there is capacity to significant increase its investment in these programs if Council deemed this a priority.

### **Significant Tree Register**

WERA supports the continuation and expansion of the Significant Tree Register Program and the expanded application of VPO protection to individual trees of local significance. However, this program requires additional resourcing and expansion if it is to generate a current register as an evidence base for these local controls. The issues raised above in the application of VPO's also need to be addressed (i.e. the impact on other trees which are not protected).

Reference is made in the Paper to the progressive updating of this Register. However, the Register is not frequently updated and it is likely that many trees which could have been incorporated in the Register for protection have not been, as the process is relatively under-resourced in Whitehorse and the pre-requisites for inclusion so limited.

### **Tree Conservation Policy**

The Tree Conservation Policy in the local planning framework provides for protection and regeneration of trees in new developments across the whole municipality. However, this policy is of limited impact in relation to zoning, location near activity or high change high density areas. As a policy rather than a statutory control endorsed by the Minister for Planning, this local policy carries little weight at VCAT.

### **Local Laws**

Council's paper notes that an alternative to statutory planning and local policy is to enact a local law preventing the removal or damaging of specified trees and vegetation. This option was not strongly supported by the officer report given that the penalties are very low, enforcement is costly and it is not likely to be effective in practice. WERA supports the proposition that a statutory planning approach to tree conservation is likely to be more effective than local laws.

### **Recommendations**

1. WERA recommends that Council undertakes a detailed review of the effectiveness of its current suite of tree protection and conservation provisions, preferably through the procurement of an external expert consultant. The 2014 strategic review of the Whitehorse Planning Scheme did not investigate the operation of the VPO and SLO overlays in any detail given the timetable for the introduction of the new planning zones in 2014.

The December 2014 Tree Protections Option paper does not in our view constitute a sufficient basis on which to develop options for improved statutory protection for trees in this City.

2. This review should be conducted after the Planning Panel review of the NRZ revised schedules in Whitehorse and after an audit of the remaining tree coverage across all precincts. This audit may be undertaken cost effectively through an application for access to the GIS tree survey software which is being made available via the 2020 Vision program mentioned below. The completion of the Tree Register update and an audit will provide a crucial evidence base for the extension of VPO overlays over the NRZ and GRZ precincts with appropriate schedules.
3. WERA supports the adoption of similar schedules for site coverage, site permeability and planting of upper canopy trees in NRZ 5 as the other NRZ schedules.
4. Subject to the findings and recommendations arising from Recommendation 1 above, WERA supports in principle the development of an extended VPO with appropriate schedules to provide statutory protection for all upper canopy trees and significant gardens in the City. Currently VPO and SLO apply to only 10% of the City as the VPO is tied to individual significant trees on the register. There is an opportunity to significantly expand the VPO overlays especially in the western end of Whitehorse to and VPO overlays currently only protect the remnant upper canopy

The City of Banyule has managed to get a permanent VPO over most of the city based on a survey of all the mature upper canopy trees in the City. The VPO should be broadened beyond the protection of registered "significant trees" to include all mature upper canopy trees which meet agreed criteria. In fact, where there is evidence of a significant and progressive reduction in upper canopy trees over time there should be provision for protection of those which remain as well as a requirement for replacement planning in the zone schedules. This would be possible if Council were to adopt the GIS

survey methodology outlined below to monitor the total tree assets in each Ward such that there should be provision for replacement planting as well as retention to maintain an agreed canopy cover benchmark which is monitored over time.

WHC should expand its significant tree register program and resourcing to develop a more current and accurate basis for the application of significant tree protection VPOs especially in the western precinct. The expansion of this program should give priority to those parts of the City which currently lack any statutory protection for their mature upper canopy trees which meet the tree significance criteria.

The evidence base for an expanded VPO ( as discussed in 3) to include all upper canopy trees should utilise the latest GIS technology to survey all the remnant upper canopy trees not simply those assessed as “significant” by an arborist (and lesser vegetation) in Whitehorse on both public and private land. WHC should access the GIS urban forestry software via 2020 vision (see my previous paper and the reference to <http://202020vision.com.au/>\_\_\_\_The progressive loss of valuable tree canopy not only represents a loss of amenity and neighbourhood character but also a significant reduction in capacity to manage urban heat sinks and community health and safety not to mention carbon capture which may have a significant economic value in the future as climate change begins to impact more directly on our lifestyle. It also poses a threat to local fauna habitat.

The arguments for improved tree protection, retention and replacement on the basis of canopy coverage rather than individual protected trees is well supported by research on climate change and is the foundation for international and Australian urban forest strategies. As the majority of trees in the western precinct are located on private land, Council will need to enact more broad-based and canopy-based approaches to conservation and replacement than has been the case to date.

5. The adoption of an **urban forest strategy** for public and private land would extend varying degrees of statutory protection to all mature upper canopy trees in the City, regardless of their location and neighbourhood character designation. The loss of canopy (and its replacement) should be monitored and the subject of public reporting. An urban forest strategy based on canopy coverage and density makes more sense in the context of climate change and the protection of neighbourhood character across the city. Canopy coverage can be monitored and reported such that reductions in canopy must be justified and replacement trees provided.

The strategy should include key performance indicators and benchmarks as to the health, age, carbon storage capacity and valuation, specifies and distribution of its treed assets as the evidence base for its regulation of development in the city and its conservation of its treed assets.

The carbon capture and storage capacity of this urban forest should be assessed and assigned a value on private and public property so that in the determination of individual planning and development applications, the net impact of a proposed reduction in tree canopy can be calculated. Logically, it should then be possible to more accurately assess the costs and benefits of competing policy priorities for the Council between maintenance of the tree canopy and its value and the urban development. The externalities of development for local neighbours and for the progressive loss of canopy in a designated area should be taken into account for a fully sustainable approach to protecting trees in each ward, in order to maintain the canopy trees which are the primary character value and amenity of the City.