



ST PETERS RESIDENTS ASSOCIATION INC.

E-mail spra@senet.com.au

Representing the Residents of St Peters, College Park, Hackney, Stepney, Maylands and Evandale.

SUBMISSION TO THE PARLIAMENTARY INQUIRY INTO ADELAIDE'S URBAN FOREST Environment, Resources and Development Committee

A recent Conservation Council study estimated that Adelaide is losing about 75,000 trees a year. We submit that this is due to a range of factors including population growth, housing densification policy, life-style changes, a failure of the planning system to reserve space around built structures for vegetation and trees, weak legislative protection for existing trees, commercial development and powerline clearance. Government must encourage Council policies and tree species selection.

Trees provide many benefits in the urban setting, including summer shade, habitat for urban wildlife, residential amenity, improvements in psychological well-being, amelioration of sound, pollution and some protection from wind. Climate change has brought a renewed interest in urban trees as awareness of the "urban heat island effect" has grown. This effect is the increase in urban temperatures as trees are removed to make way for more people and buildings. It has been observed in cities across the world. Without urban trees Adelaide would be three to four degrees hotter in summer. Climate change is increasing average temperatures.

Population growth:

South Australia's population has increased by just over 380,000 people over 30 years (1991-2021). Most of this growth has occurred in Adelaide where our population is concentrated. All over the world, as cities grow in numbers of people and buildings, trees and vegetation cover tend to decrease. At present, lobby groups are calling for South Australia to pursue a population target of two million people, which represents a significant increase on our current population of 1,781, 516 (2021 Census figure).

It is not widely recognized that expensive large-scale infrastructure upgrades are often necessary to accommodate population growth. These often lead to the large-scale removal of trees. Road and road intersection widenings are most obvious. These often destroy many well-established trees. Last year over 120 significant gum trees were cut down at Golden Grove to accommodate a road widening project. The Department of Road Transport tends to be a law unto itself. However much greater parliamentary oversight of this Department is needed to try to ensure that alternative proposals to road widenings and intersection widenings can be seriously considered to minimise the removal of established trees.

Urban densification & infill policy:

Since the late 1980s successive State governments, both Labor and Liberal, have supported housing densification policy which required local councils to support the densification of parts, or all, of their residential suburbs. As a result, tens of thousands of older houses with their gardens and trees have been removed to make way for denser houses and units which often have little, or no space left on their sites for trees to grow.

Ad hoc urban infill has had detrimental impacts on residential character and amenity in many residential suburbs and these impacts have become more publicly acknowledged by both developers and the current State government in recent times. Loss of trees and vegetation is one of the negative impacts of much ad hoc urban infill.

Better planning of large-scale infill development on large sites is one advantage of planned large developments. The re-development of large brownfield sites (former commercial and industrial land) generally results in a less net loss of trees than does the infill development of existing residential suburbs. The re-development of large greenfield sites may create community concern about the loss of open space and trees as well as the loss of historic character. Greater effort by regulatory planning bodies should be made to ensure that much larger numbers of trees are protected on any re-development of greenfield sites.

The Planning and Design Code provides for one tree to be planted per residential allotment in a greenfield site development. While residential land sizes are likely to be relatively small, there should still be space for one tree in the front garden and one tree in the rear garden.

These developments should also have roads and footpaths which can accommodate street trees. Too often in the north and south of Adelaide newly developed residential suburbs suffer from a lack of street trees. Infill housing areas are particularly in need of cooling vegetation in summer. Without trees and vegetation these suburbs may be the slums of the future and unbearably hot for residents to live in without being very dependent on air-conditioning.

Life-style changes:

The popularity of back yard swimming pools in recent decades has contributed to less interest in having back yard trees. Likewise, the trend for people to build large house extensions has reduced space available for trees to be planted.

Failure of planning system to protect space for trees

There has been a trend in recent years for people to build large houses. Large houses with high site coverage are contributing to the loss of urban trees. A 50 per cent site coverage allows a large new house to be built in the middle of an allotment and the only open space around the new dwelling consists of narrow pieces of land along the sides of the new dwelling, a front garden and a small or no back garden. Front setbacks are often mandated in the State-wide Planning and Design Code for new dwellings but rear setbacks are rarely mandated.

Many new houses are being built without back gardens. This is a tragedy for young families with children and a great loss for our trees and urban wildlife (Ref. "The Life and Death of the Australian Backyard" by Tony Hall (CSIRO, 2014). It is a disgrace that our planning system does not even recognize the term "back yard" or "back garden". This iconic much loved feature of Australian suburban life is on life support.

There needs to be a mandated minimum permeable area specified for new suburban housing and minimum rear setbacks to ensure adequate vegetation and trees are planted. CSIRO researcher and author Tony Hall concludes from his nation-wide study of the loss of back-gardens over the past 20 years

“The procedural solution would be very simple. Planning codes should specify rear setbacks of 8-10 metres, in the same way that they specify front setbacks of, say, 6 metres. They could also specify maximum plot coverage of 35 per cent.” (Hall, p. 149)

Legislative protection of trees:

Developers should be encouraged to build around existing substantial trees. The current requirement that a tree must have a three metre or two metre circumference (measured one metre from the ground) to begin to qualify for some protection is too onerous. Most of South Australia’s trees will never reach this trunk size. We submit that a half metre trunk circumference for a Regulated Tree and one metre for a Significant Tree would be more appropriate.

While this would generate more applications to councils to remove trees, the increase in protected trees would go some way towards improving our tree canopy and slowing the current rate of loss.

At present a range of factors is considered by development assessing authorities when assessing whether a tree warrants protection as a Regulated or Significant Tree. We submit that these factors should include: trunk size, canopy size, height, aesthetic contribution to streetscape, contribution to the ecology of the local environment and contribution to summer shade. Trees also sequester carbon dioxide and airborne pollutants and help absorb the noise of motor vehicles, but assessing these last characteristics would be difficult. We question whether council planners have the expertise to assess whether a tree is important for the ecology of a local area and to recommend more ecologists be employed by councils to help with this work.

We oppose the requirement that a Significant or Regulated Tree (apart from Eucalypts and Agonis Flexuosa (Willow Myrtles)) can be cut down if they are within 10 metres of a dwelling or swimming pool. Few trees on suburban allotments are more than 10 metres from dwellings or swimming pools. We suggest that no fixed measurement should be specified in the Planning and Design Code for a Significant or Regulated Tree in order to escape from the threat of deliberate destruction by humans. Good footing design can deal with the issue of tree roots.

Current tests for removal of a Significant Tree include the health and structure of the tree, the risk to people and property and development (where all reasonable alternative development options and design solutions have been considered). A lesser test applies for the removal of a Regulated Tree. The dilemma here is that a new development proposal will nearly always win out over the retention of a Significant Tree which stands in the proposal's way. Given the net yearly loss of trees in Adelaide the "balance" sought between development and tree retention has clearly swung in favour of development. So the tests for the removal of protected trees need to be strengthened.

We submit that no tree species should be declared to be outside the protection afforded by the Regulated Tree and Significant Tree provisions. A "weed" is only a plant in the wrong place. Even the much maligned pine trees afford pine cones for cockatoos (including the Yellow Tailed Black Cockatoo classed as "vulnerable" in S.A.). These birds have lost their regular food source due to the colonial large-scale removal of Casuarina trees.

Need for trees in commercial areas:

In the Planning and Design Code the Urban Tree Canopy Overlay applies to residential areas but not to developments in mixed use and other non-residential zones. This is a missed opportunity and results in an inconsistent approach to tree planting and retention. You only need to visit a major shopping centre like North Park on the Main North Road Enfield or the Firlie Shopping centre on Glynburn Road to notice the lack of trees to provide shade for hundreds of parked cars on hot summer days.

Even when new shopping centres are required to plant trees, often the small hole dug for a young tree and the inadequate area of permeable soil placed around it result too often in the young tree having little chance of survival, sitting as it often does in a sea of hot concrete or asphalt. Where a tree does survive, the owner of the centre may give it a regular "short back and sides" prune which reduces the shade it provides and shortens its already brief lifespan. We have studied the fate of such trees for decades. This is most often a problem in shopping centres in council areas which have poorer tree cover than in the more affluent and leafy council areas.

Planning approval bodies have often shown little interest in the lack of adequate landscaping in major commercial premises in the past, especially in council areas with relatively poor tree canopy. Assessing bodies such as Council Assessment Panels and the State Commission Assessment Panel need to bring in qualified arborists to ensure that substantial shade-giving trees are planted in shopping centre and in other commercial centre carparks can survive more than a few years. Restrictions on savage pruning practices also need to become standard conditions of consent and followed up with regular inspections.

For other commercial developments, many of these benefit from landscaping and trees planted around them, whether it be a medical surgery or an office block. We submit that the Urban Tree Canopy Overlay in the Planning and Design Code should apply to all zones and additional policies should cater for non-residential developments.

Powerline Clearance.

The regular drastic pruning of established street trees under high voltage power lines by SA Power Networks has caused much community anger and significant damage to tree canopies and the amount of summer shade street trees provide.

It should be a long-term aim of our State government to assist financially with the undergrounding of unsightly power line, especially in residential areas, in the interests of tree health and resilience as well as the amenity and sustainability of our suburbs.

Council planting of trees:

Most councils in Adelaide are trying to plant more trees. Adelaide has a hot dry climate and many newly planted street trees succumb to the summer heat and limited watering (perhaps 10 to 20 per cent). A nature strip is generally an inhospitable place for a tree to grow.

Residents should be encouraged to water newly planted street trees next to their property.

This was done by the former St. Peters Council which encouraged residents to volunteer to be a street tree warden, and supplied garden hoses so that trees could be watered. This person kept an eye on street trees and reported problems to council.

Many councils only water new trees for two or three years. After that a young tree is on its own. Councils should be encouraged to water new trees for three or four years to improve the resilience of new street tree plantings. Tree inlets are gradually being installed to direct rain from gutters on to new trees. This is an excellent innovation but it is expensive for councils to install and perhaps State governments could subsidize this. Other water recycling projects to retain water for street trees such as “rain gardens” should also be encouraged.

Councils could be encouraged to plant orchards and urban forests in some of their reserves. These would need to win the approval of local residents.

At the end of the day, councils do not have enough land to make up for the loss of trees on private land due to development pressures. So councils can never plant enough trees to fill the void.

Tree species for streets:

For many years the Waite Arboretum has researched appropriate species for councils to plant as street trees.

There has been an on-going debate over whether native trees or exotic trees should be planted in Adelaide's streets. Both types of trees have their strengths and their deficiencies. Native trees are good for birds and wildlife and providing dappled shade but may lack a consistent trunk size and shape. Exotic trees tend to provide heavier shade and more cooling in summer and to allow winter sun access to streets and people's houses.

Similarly there is debate about whether planting the one species in a street vs planting a mix of trees is a good idea. Planting mainly one species in a street provides aesthetic benefits in “tying together” the disparate elements of a street and presenting a more coherent streetscape. This is particularly important in historic residential areas. Planting different types of trees in a street may encourage more bird life and wildlife habitat. In reality many streets in many council areas contain some mix of street tree because council planting plans change over time. Some councils remove all the street trees in a street when they get to a certain age but this may create opposition from residents. Most councils replace trees

as they are damaged or die and therefore street trees are of various ages. Councils need to be more vigilant in filling in gaps where street trees have died or been removed. In too many council areas, residents or councillors have to report gaps and then they can wait for a year or two or more before a replacement tree is planted.

We submit that caution should be exercised in recommending the large-scale removal of any species of trees on the grounds that climate change may make it more difficult for these trees to survive. Extra watering and mulching may be one option to extend the life of such trees.