



Submission

Natural and Built Environments Bill - draft for consultation

Preamble

Why we need urban tree protection:

- **Loss of trees.** Deregulation via the removal of blanket tree protection rules from the RMA in 2012 has led to significant losses to the urban forest in New Zealand's cities since the new rules were implemented in 2015, especially of large trees on private land¹. Since then, the pressure of intensification (a good example is the permissive zoning in Auckland Council's Unitary Plan which avoids the need for resource consents for permitted activity developments) has increased the speed with which, Auckland in particular, is losing its mature trees.
- For example, as at 2016, the average canopy cover across Auckland was at 18%, but varied between 8-31% depending on the local board area, with poorer suburbs in the south having far fewer trees. However, this figure disguises the reality of the losses at that time, which is shown by the change in the structure of the urban forest. It is now dominated by small trees, with 75% of the canopy being less than 10m high, only 5% more than 20m high and no local board in Auckland having more than 1% of trees greater than 30m high². As at 2016, over 60% of the urban forest in Auckland is on private land and has no legal protection whatsoever³.

- **Large trees matter to cities.** It is the larger trees that provide the greatest ecosystem services and benefits that urban dwellers value directly and passively, and need in order to maintain their health and wellbeing. Trees store and continually sequester carbon, provide shade, treat stormwater and lessen outflows to beaches, reduce flooding and air pollution, produce oxygen, reduce extreme heat island effects, reduce crime, improve local economies, temper traffic speeds, increase property values and have a significant measurable effect on improving our physical and mental health. They even make us spend more in commercial areas because we feel happier when we are surrounded by trees⁴.
- Other cities around the world value their urban forests in economic terms and have quantified the benefits from their trees. Melbourne considers the trees on public land are worth over A\$700m⁵. In Greater London, the benefits from trees are valued at NZ\$275m per year⁶. It is fair to say that New Zealand is decades behind the rest of the world in understanding and acknowledging the benefits and value of our urban forest.
- **Reduction in professionalism.** Deregulation (removal of tree protection rules) has also destroyed the requirement for and development of professionalism in the arboricultural industry, resulting in a proliferation of unsafe, unqualified operators undercutting qualified arboricultural professionals. This has resulted in a frenzy of tree removal for short term financial gain that is not sustainable, as landowners shop on lowest price rather than quality of service for tree works. With over 80 arboricultural companies currently operating in the Auckland region, a very conservative estimate has the city losing over 1000 trees per week⁷.

International Examples

Many cities globally already recognise the values & benefits of an urban forest & have rules and publicly accessible tree maps in place to protect them. Current canopy coverage across Brisbane is 44%⁸, Melbourne has 22% tree cover and a target of 40% by 2040⁹, New York City has 21%¹⁰, London has 21% with a target of 31% by 2050¹¹. All these cities have a significantly larger population than the likes of Auckland, Wellington and Christchurch combined, yet manage to retain a greater percentage of their land area as urban forests.

The Outcome

Aotearoa New Zealand needs to manage and protect its remaining urban tree assets by applying standards and targets in national legislation, which are implemented locally via Council planning schemes. There is a need for particular emphasis on retaining mature and maturing trees because they provide significant benefits & services and are most at risk due to the pressure on developable land area with urban intensification occurring at pace in a number of our cities throughout the country.

Incentivising both the retention of large and maturing trees as well as increasing the overall canopy cover of our cities nationwide is the purpose of this proposal. The challenge is how to incentivise landowners, developers and Council regulators to appreciate that mature trees are living assets which have valuable and quantifiable benefits and services to offer the wider community, are of equal or greater value to manmade infrastructure, and which, unlike built assets, increase & become more valuable with time in direct proportion to their increasing size with age. The return on natural capital is acknowledged as being greater than built capital^{13,14}; where the more people a city has, the more pressure is placed on its urban forest and the value the residents place on green space increases.

If New Zealand does not legislate to protect the remaining urban forests now, the cumulative effects of the ‘property-by-property death by a thousand cuts’ currently happening will result in a near total loss of mature and maturing trees on private land in our intensifying cities within 20 years. These trees can never be replaced once the space they occupy is taken by buildings and infrastructure.

We can have quality urban design, an intensified urban environment housing more people and a healthy urban forest with mature trees that sustains us, but we need to require it, not assume that the market will deliver such an outcome. In the last 6 years, Auckland’s market alone has shown that this is most definitely not the case.

The Tree Council urges the Government to enable urban tree protection to be applied in our cities via this new legislation. We have proposed changes to the draft legislation below which we consider will open the door to this possibility. However, further work is required to develop targets and limits to require this to happen promptly, before the rest of our large trees on private land in our shared urban forests are lost in the race for short term financial gain.

We are eager to work with the Government to develop further proposals on how to achieve the outcome above.

The Draft Bill

Part 1

3 Interpretation - provide definitions for “ecosystem services”, “target”, “urban forest” (see below)

Definitions

Urban Forest – all of the trees and other vegetation along with the soil, water, air and sunlight that supports its health, growth and survival forming a complex network weaving through public and private land, involving people, wildlife and the built environment. It is recognised as a primary component of the urban ecosystem delivering essential health and economic benefits and services.

Target - environmental targets are verifiable evidence that you are moving towards achieving your objective. For example, your objective may be to achieve zero waste for your company; your target would be to recycle 30% of your waste stream in Year 1.

Ecosystem Services - Ecosystem services are the benefits provided to humans through the transformations of resources (or environmental assets, including land, water, vegetation and atmosphere) into a flow of essential goods and services e.g. clean air, water and food¹⁵

Part 2

| | | |
|---|--------------------------|--|
| 5 | 1) a) | ... protecting and <u>then</u> enhancing |
| | 2) a) | ... environmental limits <u>and meet targets</u> |
| 7 | Heading | Environment limits <u>and targets</u> |
| | 1) to 6) (<i>not</i> 3) | Add <u>and targets</u> |
| | Insert after 3) | Add in new section describing how 'targets' may be formulated |
| 8 | b) | Ecological integrity <u>and ecosystems is/are...</u> |
| | k) iii) | Add new point – <u>ensuring a sustainable urban forest</u> |
| | l) v) | Add new point – <u>sustain human health and wellbeing</u> |
| | o) iii) | Add new point – <u>and the increased use of green infrastructure</u> |

Part 3

| | | |
|----|-----------|---|
| | Heading | Environmental limits <u>and targets</u> |
| 12 | 1) and 2) | Add <u>and targets</u> throughout Section 12 |
| 13 | 1) b) | ... <u>and ecosystem services</u> |
| 14 | a) | ... <u>and in order to achieve the environmental targets</u> |
| | b) | ... <u>and through achieving the relevant environmental targets</u> |

| | | |
|---------------|------------------|---|
| 16 | Text | In setting environmental limits <u>and targets</u> ... |
| Part 4 | | |
| 22 | 1) a) | state the environmental limits <u>and targets</u> that ... |
| 25 | Heading | Power to set environmental limits <u>and targets</u> for region |
| | 1) a/b and 2 a/b | Add <u>and targets</u> |

References

- 1 - Tree Loss in the Waitemata Local Board over 10 years 2006-2016
<https://www.aucklandcouncil.govt.nz/about-auckland-council/how-auckland-council-works/local-boards/all-local-boards/waitemata-local-board/Documents/tree-loss-waitemata-local-board-2006-2016.pdf>
- 2 - Auckland's urban forest canopy cover: state and change (2013-2016/2018), Auckland Council 2020
<https://knowledgeauckland.org.nz/publications/auckland-s-urban-forest-canopy-cover-state-and-change-2013-20162018-revised-april-2021/>
- 3 - Auckland's Urban Ngahere (Forest) Strategy, Auckland Council 2019
<https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/topic-based-plans-strategies/environmental-plans-strategies/Pages/urban-ngahere-forest-strategy.aspx>
- 4 - Tree Sense, Susette Goldsmith 2021; Our Lost Trees, Mels Barton
<https://www.masseypress.ac.nz/books/all/all/tree-sense>
- 5 - City of Melbourne. (2012). Urban Forest Strategy: Making a Great City Greener: 2012–2032, Melbourne.
<https://www.melbourne.vic.gov.au/SiteCollectionDocuments/urban-forest-strategy.pdf>
- 6 - Wilkes P, Disney M, Vicari MB, Calders K, Burt A “Estimating urban above ground biomass with multi-scale LiDAR”. Carbon Balance and Management 13(1) 2018.
<https://iris.ucl.ac.uk/iris/publication/1571466/1>

7 - Based on a high level telephone survey. Includes trees 4m+ in height on private and public trees. Excludes land clearance.

8 - Brisbane's Urban Forest

<https://www.brisbane.qld.gov.au/clean-and-green/natural-environment-and-water/plants-trees-and-gardens/brisbanes-trees/brisbanes-urban-forest>

9 - Melbourne Urban Forest Tree Map <http://melbourneurbanforestvisual.com.au/> and <https://www.melbourne.vic.gov.au/community/greening-the-city/urban-forest/pages/urban-forest-strategy.aspx>

10 - The Urban Forest of New York City https://www.fs.fed.us/nrs/pubs/rb/rb_nrs117.pdf

11 - Tree Canopy Cover Map, London

<https://www.london.gov.uk/what-we-do/environment/parks-green-spaces-and-biodiversity/trees-and-woodlands/tree-canopy-cover-map>

13 - Natural Capital, the secret to sustainable cities

<https://www.iucn.org/news/europe/201711/natural-capital-secret-sustainable-cities>

14 - Corporate Natural Capital Account

<https://barnet.moderngov.co.uk/documents/s40941/Appendix%20%20Natural%20Capital%20Account%20for%20Barnet.pdf>

15 - Ecosystem Services: key concepts and applications. Constanza et al. 1997.

<http://www.environment.gov.au/system/files/resources/b53e6002-4ea7-4108-acc8-40fff488bab7/files/ecosystem-services.pdf>