Low Carbon Kāpiti - Plan Change 2 Supplementary Info 29/03/2023
Speaking in support of the submission by The Cancer Society

We support the rationale for intensification, but it must be done right to avoid negative outcomes and ensure our communities become better places to live.

New Report by the PCE March 2023

New Zealand cities have plenty of green space but it is rapidly declining according to a report released by the Parliamentary Commissioner for the Environment.

New Zealand's cities are growing. Urban intensification will help to address the country's housing supply shortage – without the increase in transport emissions that would likely accompany growth outwards. Cities that sprawl less will also reduce pressure on productive soils close to the urban fringe.

But not all intensification is the same. The style of infill townhouse development that is currently playing out within our cities comes with particular risks for the existing network of urban green space and the environmental services it provides. These changes are not easy to undo.

The benefits of urban green space can be grouped into three broad categories:

- visual amenity and placemaking
- recreation, health and wellbeing benefits
- environmental services.

While visual amenity and wellbeing benefits are important, the report focuses on the benefits provided **by environmental services. These include temperature regulation, carbon sequestration, flood mitigation, erosion control, food provision, air and water filtration and habitat for biodiversity.**

Green spaces act like giant sponges, slowing the flow of rainwater and trapping and filtering pollutants. When rain falls on a patch of bush, or even a lawn, some of the water is caught by the vegetation. Evaporation from these plant surfaces means that some rainwater never reaches the ground.

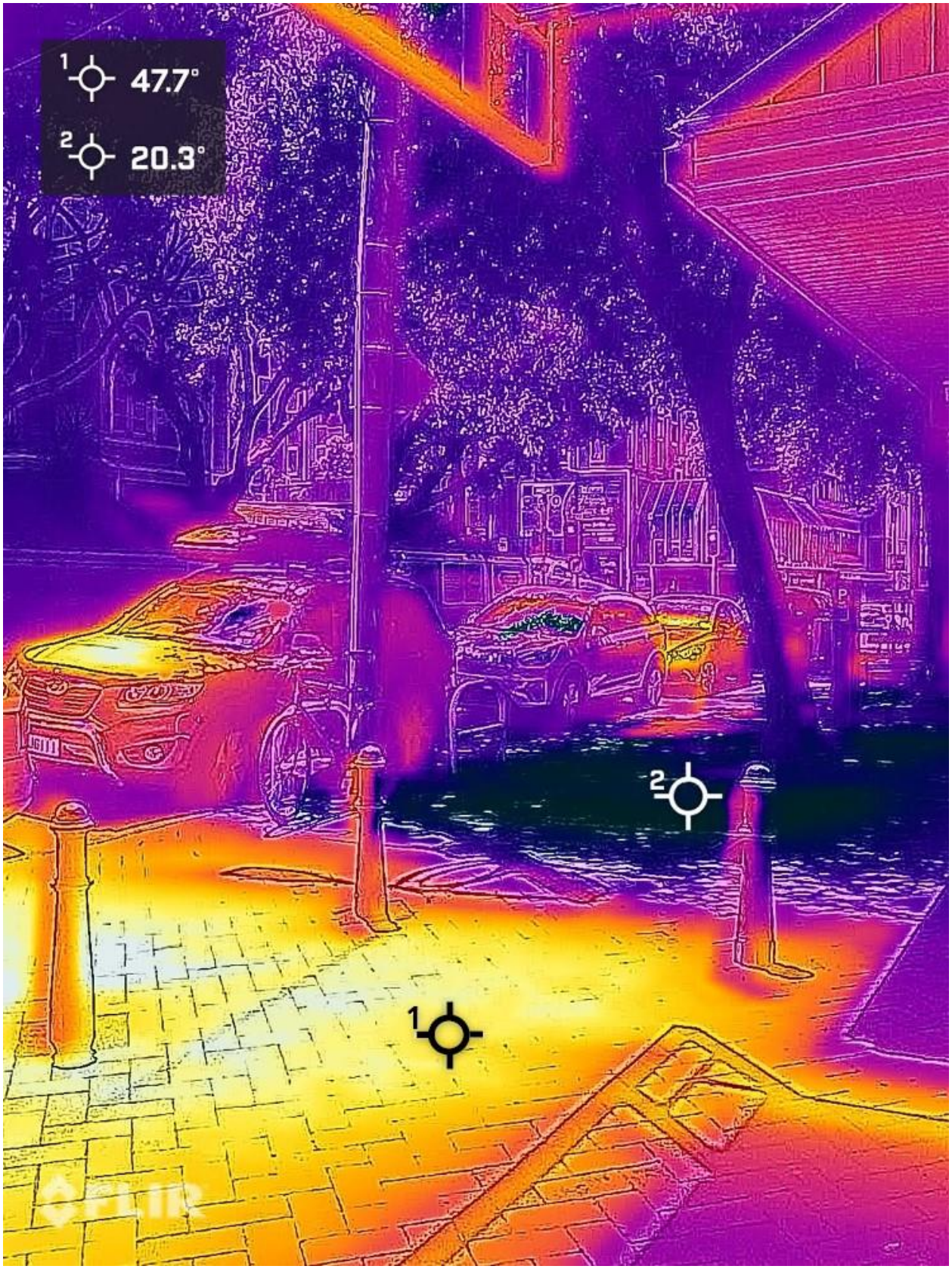
Plants also help by increasing the volume of soil and by loosening compacted ground, which allows water to soak into the soil more quickly and deeply – reducing runoff. The roots of trees and wetland plants such as sedges and rushes can be particularly helpful for this.

It has been estimated that urban vegetation can help soak up a third of the water resulting from extreme rainfall events.

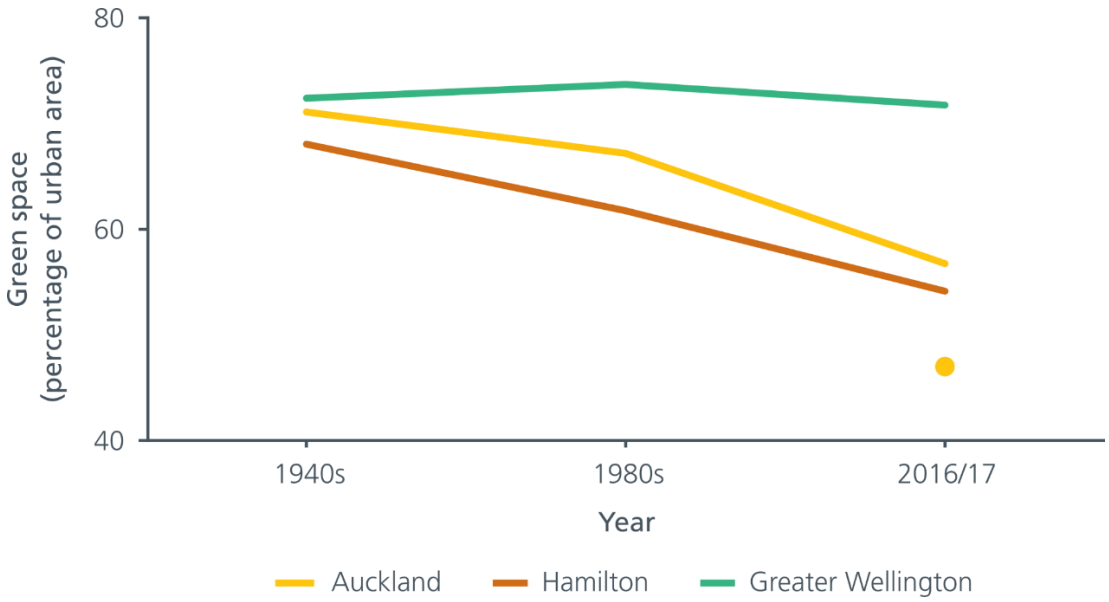
Quality and composition of green space

The type of urban green space – bare land, grass, shrubs, wetlands, trees – matters for the extent of environmental services they can provide. A wetland or a space covered in a variety of shrubs will provide more cooling, stormwater management, air filtration and biodiversity than a lawn of grass will. The combined environmental benefits will be greatest if the area is covered in forest.

One proxy for looking at the quality of green space in terms of the environmental services it provides is to look at tree canopy cover.



This image, captured with an infrared camera, reveals the surface (not air) temperature on a sunny summer afternoon in January on a treelined street in central Wellington. The yellow areas are hotter surfaces, and the blue/black areas are cooler. The air temperature was 23 °C. The surface temperatures at two locations are shown at the top left of the image. The pavement in full sun is 47.7 °C whereas the ground under the tree is 20.3 °C.



Green space has been declining

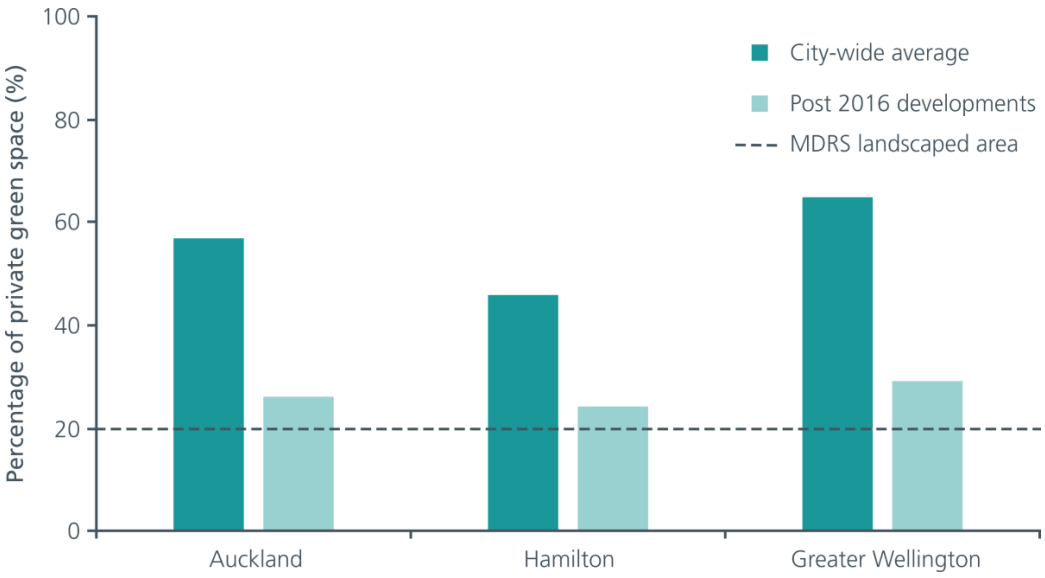
This decline is mostly due to changes on private land

Infill development has converted pre-existing yards and gardens into houses and driveways

Newer developments on the urban fringe tend to favour larger houses on smaller sections

Public green space is not compensating for this decline in private green space

To date, many councils have been struggling to provide additional parks and reserves to compensate for the reduced size of private yards and gardens. A survey undertaken for this report highlights that a number of Tier 1 councils – including Hamilton, Tauranga and Hutt City – have provided no more than a few square metres of new parkland for each additional resident since 2016.



MDRS only requires 20% Green Space.

Recommendations:

Planning for and providing urban green spaces should not be optional

Councils should consider buying land for future public green space earlier in the planning process

We need to improve the quality and quantity of green space in existing suburbs

- Include rules for minimum tree provision

- There is also scope to expand financial incentives that encourage keeping (and planting) shrubs and trees on private land. Auckland Council, for example, adjusts the stormwater contribution it charges developers according to how much of the site is sealed. Similarly, Christchurch City Council has proposed charging developers who retain existing trees less.

- Having shrubs and trees on private land does not need to stifle housing supply. Medium-density developments currently account for more than 60% of the new dwellings being built in New Zealand cities. Multi-storey apartments, by contrast, account for less than 10%. Encouraging more development 'upwards' could allow more private green space to be retained if it is carefully planned for from the outset.

- Aim for the 3-30-300 rule. This has been developed by a professor at the University of British Columbia in Canada. It calls for (a) every citizen to be able to see 3 decent sized trees from their home and (b) there is 30% of tree cover in every neighbourhood and (c) a walking distance of 300m or less from every home to a park or green space.