

## Addressing the urban heat effect in new research report on cooling common spaces

August 25 2020



Park with accessible water: Central Gardens Nature Reserve Merrylands West. Credit: Helen Armstrong

Landcom is excited to release a new report on the urban heat island effect titled "Cooling Common Spaces in Densifying Urban Environments" that offers ways to address the very serious issue of rising heat levels in urban environments.

Landcom Director of Sustainability and Learning Lauren Kajewski, said



that Landcom partnered with the Institute for Culture and Society at Western Sydney University and the University of Technology Sydney (UTS) on this report to offer new ways to cultivate cool outdoor common spaces or 'commons," and enhance liveability in warming cities.

"The research identifies patterns for outdoor common spaces to combat the urban heat island effect which is a particularly acute problem for Western Sydney, where temperatures are expected to peak at 50°C in built environments by mid-century. The report identifies ways in which the pre-planning of developments can embed more effective design approaches—or 'Cooling the Commons patterns' – to help reduce the impact of the urban heat island effect. Integrating such patterns into a site or precinct design can have a marked effect on the liveability of a community. By ensuring larger tree canopies, temporary use of public space to maximize sun shade, better public accessibility of water such as taps and drinking fountains, and a greater focus on night-time uses of public space when the temperature is naturally cooler, engagement with commons can be amplified," Ms Kajewski said.

Associate Professor in Design Studies at UTS Abby Mellick Lopes, who led the project in her previous role as a School-based Researcher at the Institute for Culture and Society, Western Sydney University, said that the "cooling patterns" identified in the report reflect both urban design and people's social activities.

"The concept of common spaces or 'commons' means that they are accessed, enjoyed and cared for by the community, which make them a central part of where and how we live," Associate Professor Lopes said.

Importantly, the research found many aspects of community life are being compromised by the retreat into private air-conditioned environments, which is rapidly becoming a design and social norm.



The Report calls for greater consideration of the connection between social practices and natural and built environments, and shows how thoughtful design at all stages of the development process can cool public outdoor space and improve community experience.

Ms Kajewski said that the practical solutions identified in the report support the environmental and social resilience of our projects to the changing nature of cities, people and communities.

"Landcom is very proud to lead the way in looking at how we can improve the social and <u>environmental sustainability</u> of built environments and we are already implementing some of these patterns within our projects at Macarthur Heights and Schofields. Upcoming projects are opportunities to test more patterns and to continue researching the <u>urban heat island effect</u> to improve the resilience and liveability of our communities," Ms Kajewski said.

**More information:** Cooling Common Spaces in Densifying Urban Environments: <a href="www.landcom.com.au/approach/re">www.landcom.com.au/approach/re</a> ... n-a-warming-climate/

## Provided by Western Sydney University

Citation: Addressing the urban heat effect in new research report on cooling common spaces (2020, August 25) retrieved 28 June 2024 from <a href="https://phys.org/news/2020-08-urban-effect-cooling-common-spaces.html">https://phys.org/news/2020-08-urban-effect-cooling-common-spaces.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.