

# Planning for a Biophilic City: The Case of the Wellington Region

By Robbie Brigham

[Download full thesis](#)



This thesis assesses 12 medium-density residential sites in the Wellington area against a best practice framework for biophilic residential development, ranking them against 8 criteria.

While large nature spaces are undoubtedly important for a city, a biophilic city is one which emphasises greening across multiple scales of the city. This requires more emphasis throughout each city's non-statutory plans on the important contribution that residential spaces can have in incorporating nature and creating connections between larger natural spaces.

In general:

- Scores varied widely between sites
- Most sites were well connected to the green network
- Those with poor connection to biodiverse areas also incorporated the fewest biophilic techniques at site level.
- Currently, implementing biophilic techniques is not seen as a priority for developers, who often forgo landscaping and green spaces due to the perceived extra costs, leading to more impervious surface and more manicured green spaces and artificial lawns.



University of Otago  
School of Geography  
Master of Planning  
2023

SUPERVISORS

[Claire Freeman](#)

SCHOLARSHIP

[People, Cities, Nature](#)  
Masters Scholarship for  
[Aotearoa BiodiverCity](#), 2023



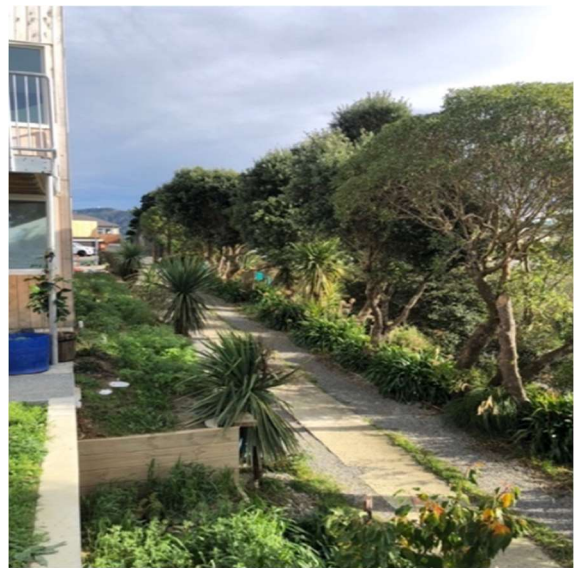
Aotearoa  
BiodiverCity

In Toronto, Canada, a green roof bylaw stipulates that all high-density developments require a green roof covering 20-60% of the roof coverage.

In Portland, Oregon, a local government project with significant community partners resulted in 33,000 yard trees, 50,000 street trees, 43 acres of eco-roofs and programmes to control invasive species. Techniques such as bioswales were used to provide stormwater runoff management while also providing crucial ecological diversity.

For the biophilic concept to be successfully applied, there must be more guidance and mandatory requirements throughout the council's district plans with more emphasis placed on creating biophilic outcomes through the rules, policies and objectives.

In doing so, this will mitigate developers having the final say in whether landscaping is incorporated into the development, as this lack of guidance is resulting in residential spaces which are void of nature and lack diversity in the techniques used to increase green spaces.



## Key recommendations

- Lower Hutt, Upper Hutt and Porirua should join the Biophilic Cities network.
- More education by councils in partnership with Mana Whenua, targeting residents, developers and councillors.
- Strengthen biophilic outcomes in the District Plan.
- Increase resident participation in maintenance of green spaces.
- Greater recognition of residential spaces as important contributors to biodiversity.
- Develop native planting guides.
- Develop a biophilic city strategy.

