

Mapping Resilience and Biodiversity

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Executive Summary

Resilience is the capacity for ecosystems to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience.

Goal: To design a self-guided tour for our guests to explore how plants and biodiversity are broadly key components in climate change mitigation and adaptation



The Challenge of Resilience and Biodiversity

Can you find the 13 key components in climate change mitigation and adaptation listed here? Explore the gardens and see how these plants display resilience in a increasingly extreme world.

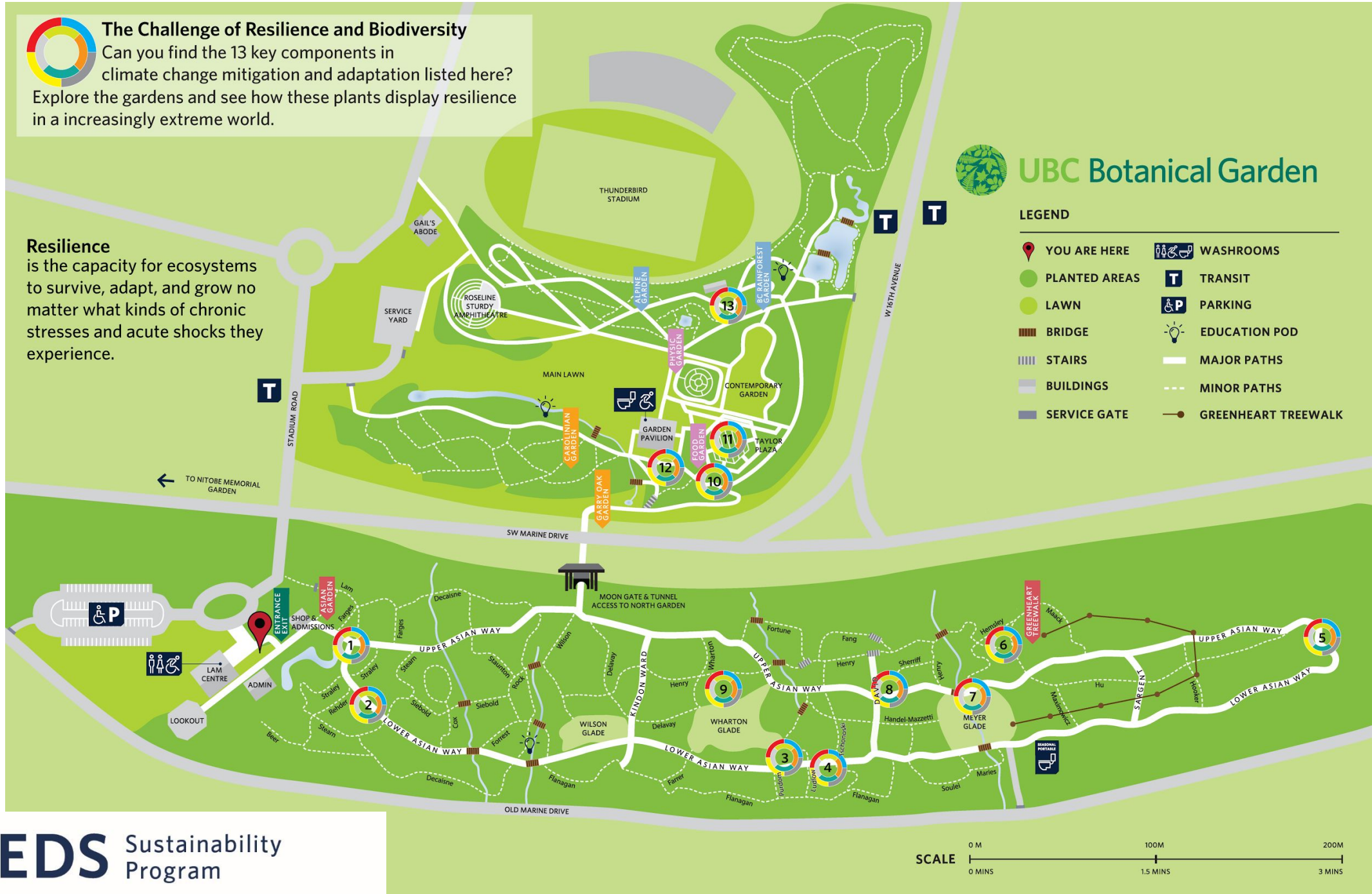
Resilience is the capacity for ecosystems to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience.



UBC Botanical Garden

LEGEND

- YOU ARE HERE
- PLANTED AREAS
- LAWN
- BRIDGE
- STAIRS
- BUILDINGS
- SERVICE GATE
- WASHROOMS
- TRANSIT
- PARKING
- EDUCATION POD
- MAJOR PATHS
- MINOR PATHS
- GREENHEART TREETWALK



Mulch

- Natural debris
- Many benefits



Forest Nursery

- Provides food and shelter
- Water storage and release



Native Western Red-Cedar

- Important to northwest coastal First Nations culture
- Adapted well to our climate



Waterwise Gardening and Soil Health

- Not all disturbances have to be natural
- Planning and being proactive can have a huge impact on plant health



Bee Diversity

- Pollination
- The garden has over 65 species of bees



Taylor Community Capacity

- Community connections and education



Static Print Map

Software used: Adobe Illustrator

- Consistency with the universal map
- Flow of tour stops
- Symbol to encompass broader diversity



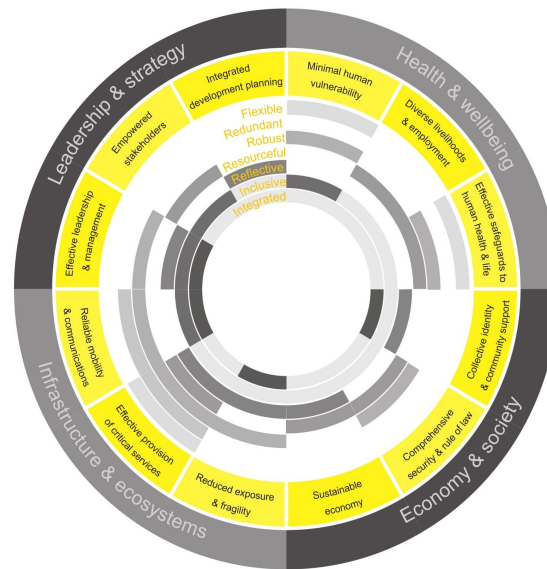
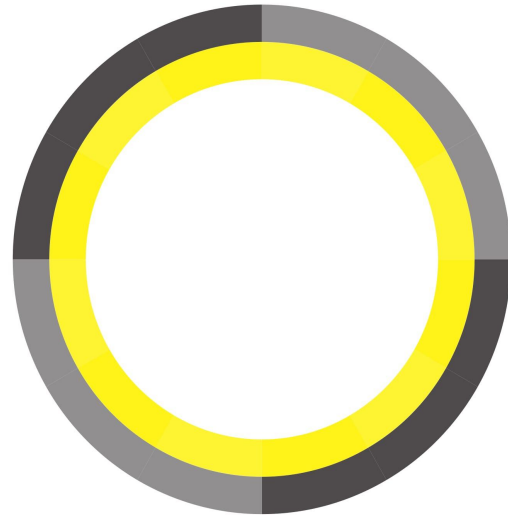
Map Symbols

City Resilience Framework

April 2014 (Updated December 2015)

"Resilience is based on the shifting relationship between scales, and between autonomy on the one hand and connectivity on the other."

Allen, P. & Bryant, M. (2011) 'Resilience as a framework for urbanism and recovery'. Journal of Landscape Architecture 6(2), p. 43



City Resilience Framework - The Rockefeller Foundation | Arup

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Interactive Online Map

<https://www.thinglink.com/scene/996183244770639874>



Take home messages

- Biodiversity and resilience can be incorporated into everyday life
- Nature doesn't always look perfect or "pristine"
- You can increase resilience by intentionally disturbing environments
- Plants and biodiversity are broadly key components in climate change mitigation and adaptation