

The background is an abstract, textured composition. It features swirling patterns of light blue, green, and yellow, interspersed with darker, more saturated blue and brown tones. The overall effect is reminiscent of a satellite view of a river network or a close-up of a geological formation. The colors are layered and blended, creating a sense of depth and movement.

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Water as an enabler for Green infrastructure Case studies from Australia

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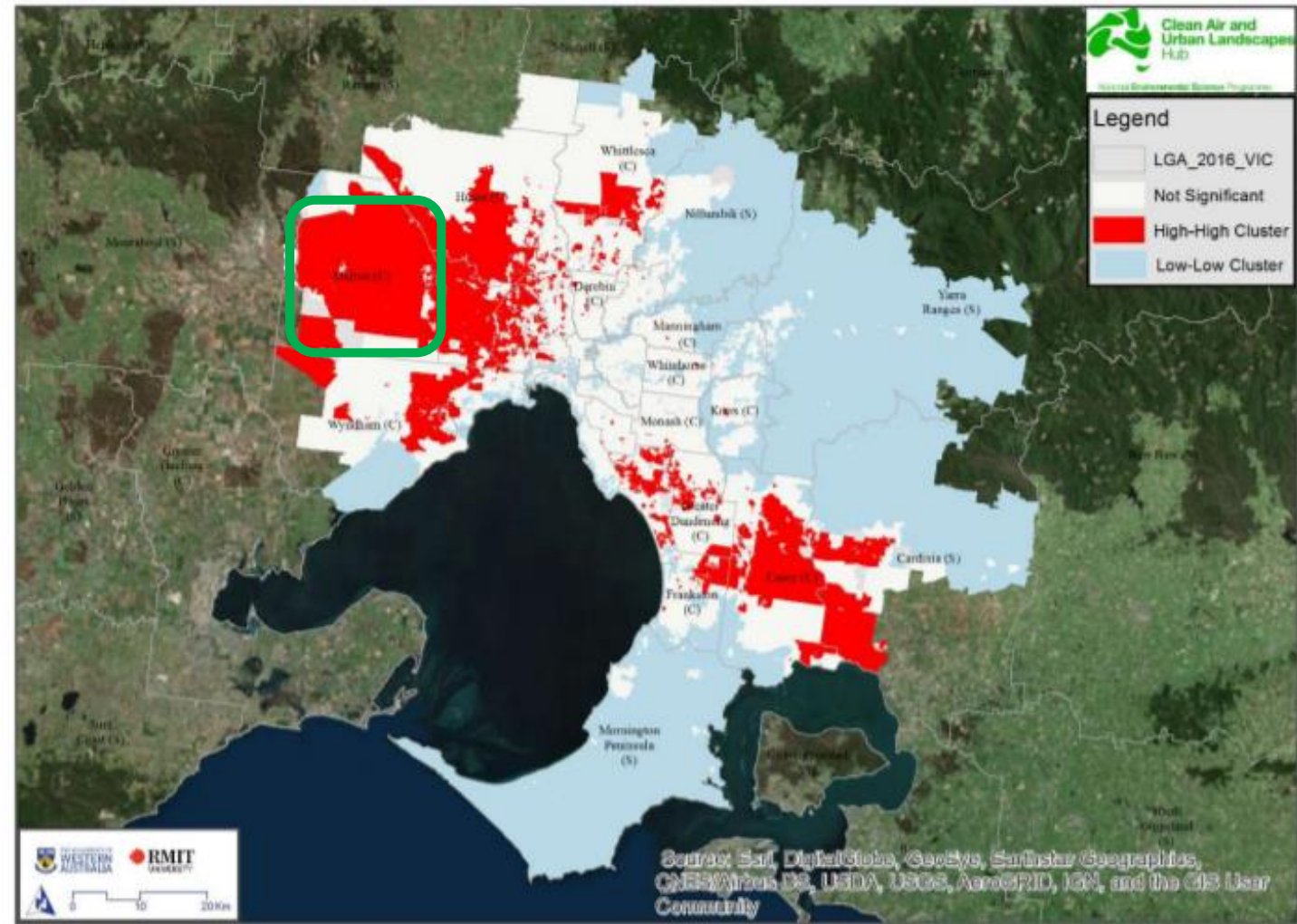
Water as an enabler for Green infrastructure

Two case studies from Melbourne that have gone from strategy to construction:

1. **The City of Melton** a large local government area undertaking a large tree planting program with passive irrigation
2. **Stamford Park**: a residential housing development that uses water at all scales to deliver green infrastructure outcomes

The City of Melton

- City of Melton, west of Melbourne ~500 km²
- Low rainfall (~ 300 - 400 mm per year)
- Rapid population growth
- Currently low tree coverage
- Very high risk of urban heat



Urban Vegetation, Urban Heat Islands and Heat Vulnerability Assessment in Melbourne, 2018

The City of Melton – Tree planting program

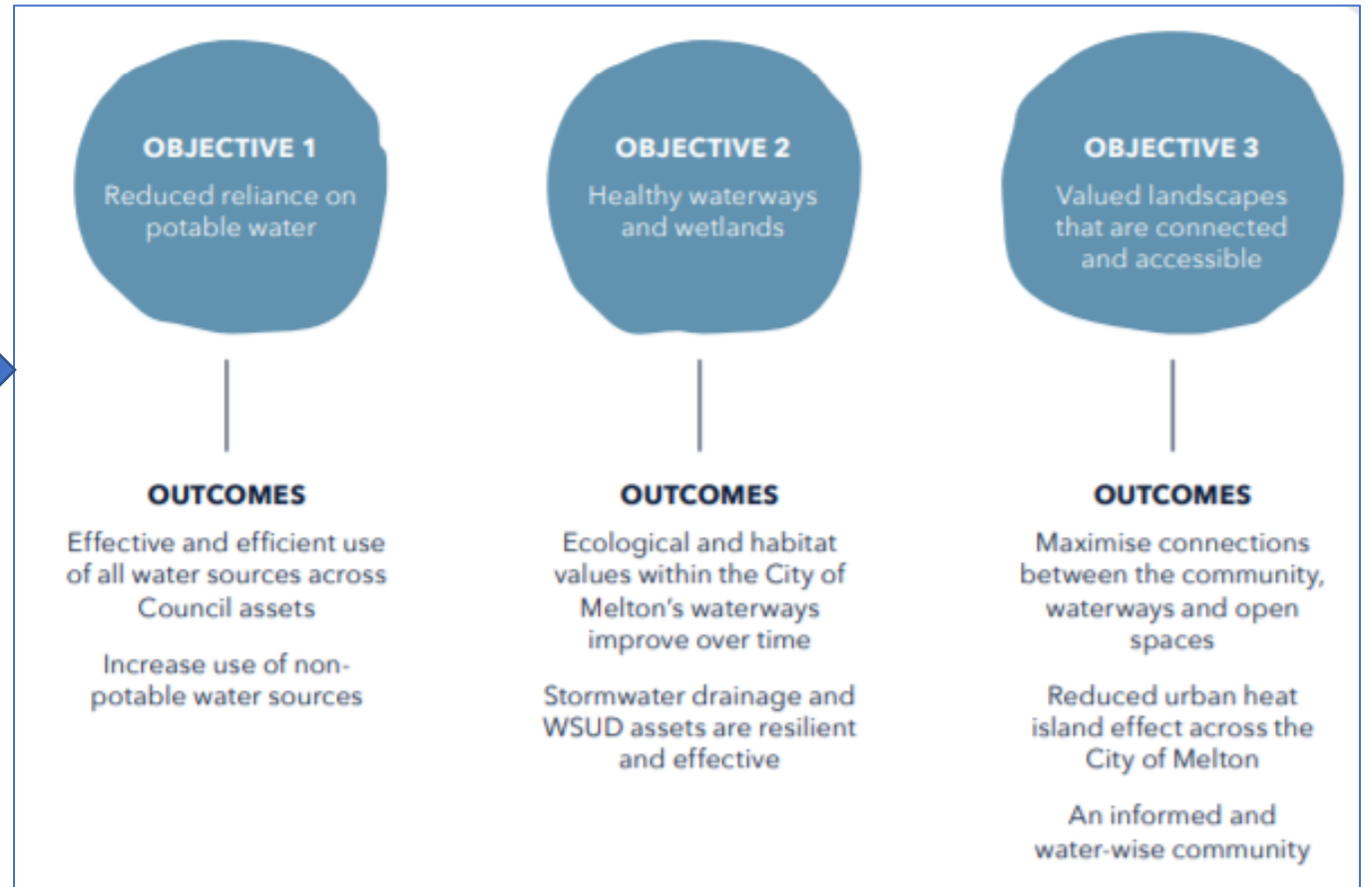


Today



Future: Opportunity for 130,000 new trees

Water as an enabler: “Passive irrigation” of street trees



		TIMING	DESCRIPTION
TARGET 3.1	Undertake a street tree passive irrigation trial to build internal capacity, understand budget and to guide the land development industry	2019	To support the targets of the Street Tree Strategy and to improve the irrigation of Council and developer planted street trees.

Tree planting and implementation of passive irrigation



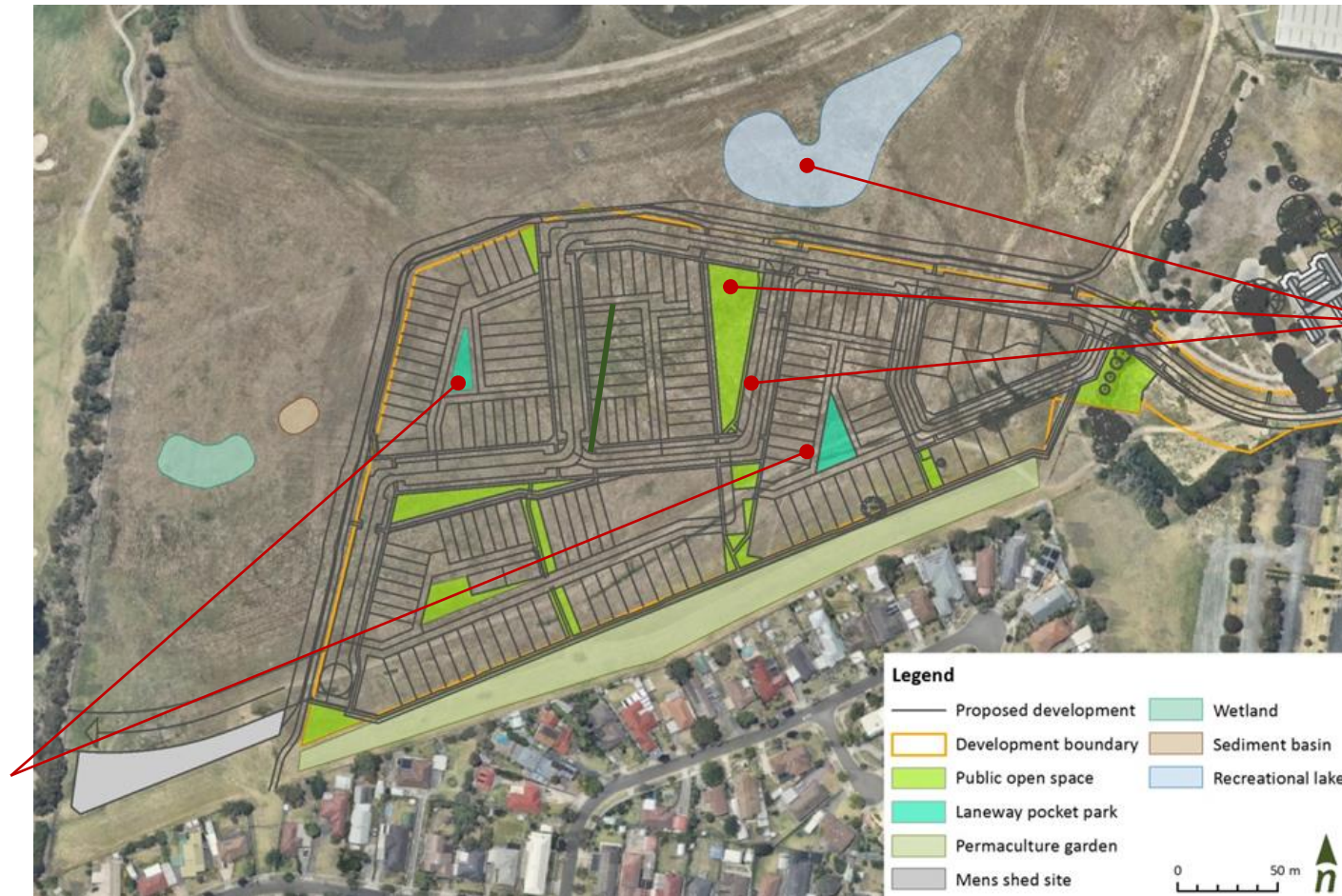
Stamford Park Development

- 6.3 hectares
- 160 residential homes & 30 apartments
- Partnership between local government (landowner) and developer



Stamford Park Development

Pocket parks: Trees and lawn passively irrigated by stormwater



Main park: Stormwater harvesting and irrigation of open spaces

Trees: Swale to distribute and infiltrate water for trees to access

Swale infiltrates treated stormwater and passively irrigate trees



Pocket parks and trees are passively irrigated



Challenges

- Organisational agreement
- Justifying cost
- Standing firm when approach is challenged / not compromising
- Buy in from maintenance staff
- Integrating with other below ground services

Lessons

- Construction teams innovate quickly and learn how to reduce costs
- There is an economic benefit in selling cool and beautiful places in Australia
- Maintenance requires ongoing education and financial support

An aerial photograph of a city. On the left, a river flows alongside a dense slum with many small, blue-roofed shacks. To the right of the slum is a dirt road. Further right, there are several large, multi-story apartment buildings with green courtyards in the center, surrounded by lush green trees and vegetation.

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We are passionate about the protection and restoration of waterways, catchments and water resources. We strive to make a positive difference to the world we live in.

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