

WATER SENSITIVE SA

What will Adelaide be like in 2045 under a business-as-usual scenario versus a cooler, greener, city?

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LIVEABLE WATER SENSITIVE COMMUNITIES.

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BEFORE



Image: highline.org

AFTER



Image T.Schenck

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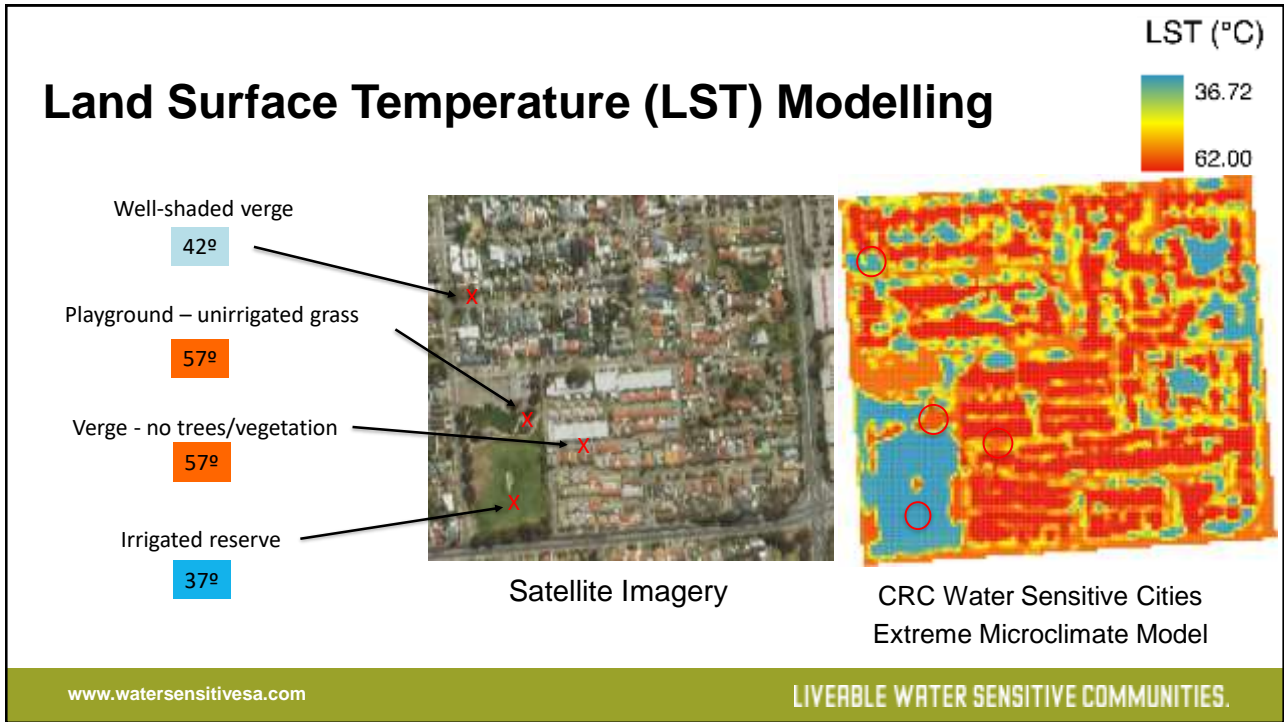
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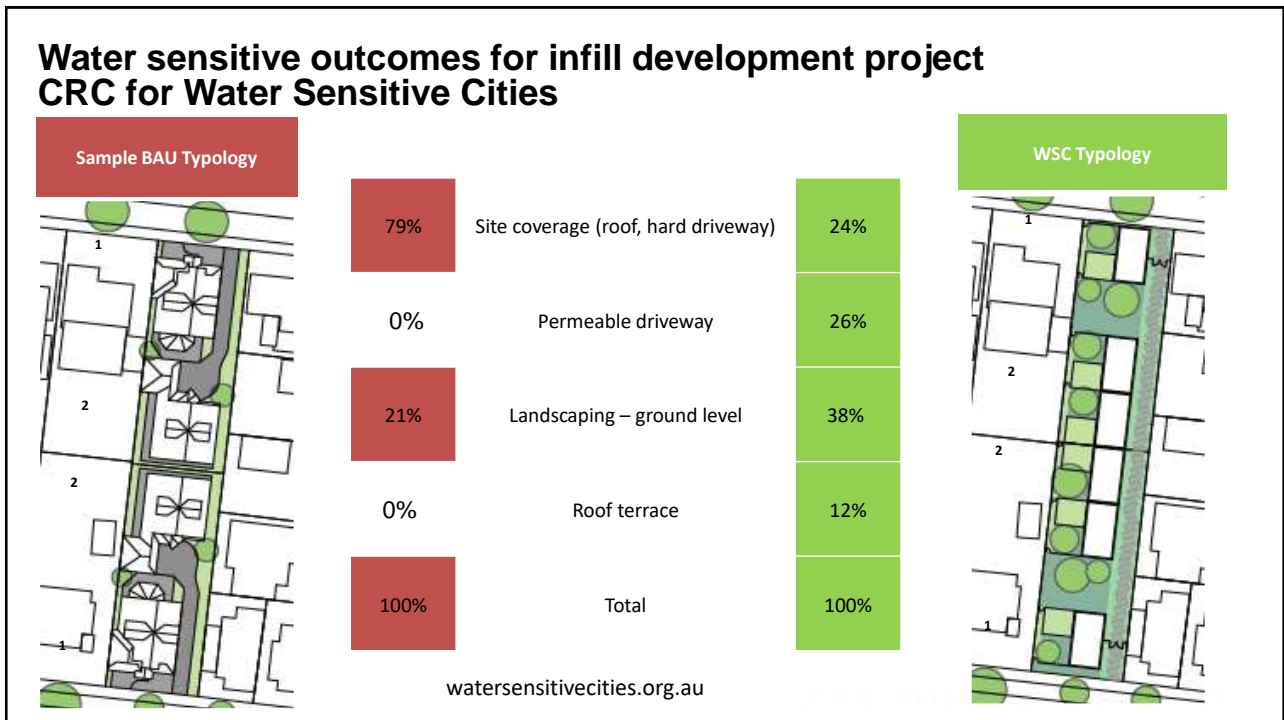
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Modelling: Change in hard surfaces/building footprints – 2045



Existing



Scenario 1 – Business as usual infill



Scenario 2 – New building types

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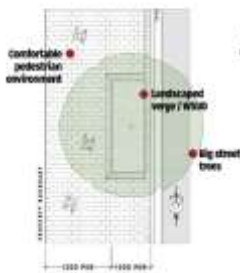
Modelling: Change in streetscapes – 2045

Scenario 1: Extra trees

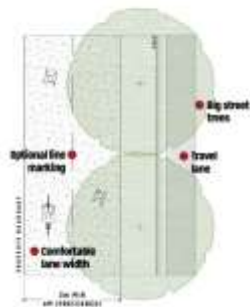
Scenario 1

- Tree in the verge for every allotment

High use streets



Shared paths



Scenario 2:

Extra trees x 2, & irrigated streetscapes

Scenario 2

- Tree in the verge for every allotment
- Tree in front yard of every allotment
- Irrigation (passive and reticulated)

Canopy for irrigated trees 80% larger than non-irrigated
Hitchmough, J. (1994) *Roof Gardens and Other Landscapes Involving Finite Volumes of Artificial Soils*



Source: City of Burnside

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Change in canopy cover to 2045

Scenario 1:
BAU infill building types & extra trees

Scenario 2: New building types, Extra trees x 2, & irrigated streetscapes

+1.5%

+6.7%

Trees +2.0%

Infill housing - 0.5%



Source: Levesque & Derrick Architects

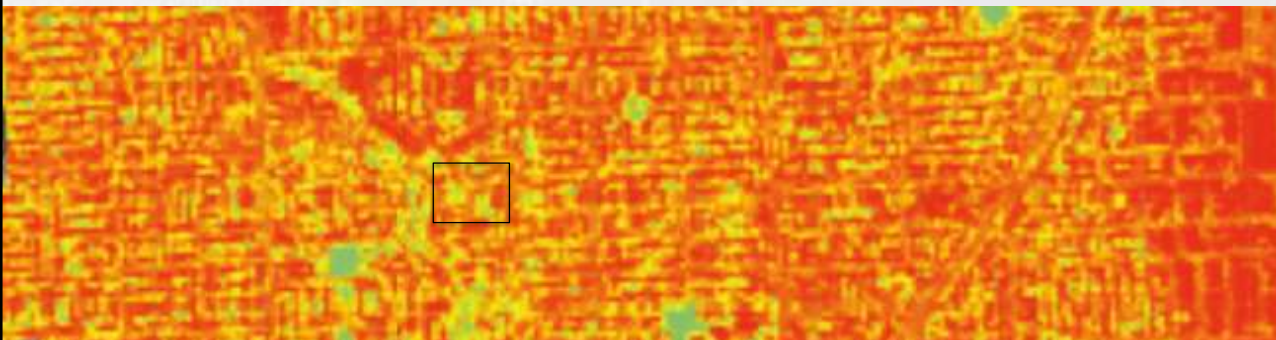
Source: City of Burnside

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Existing



Land Surface Temperature



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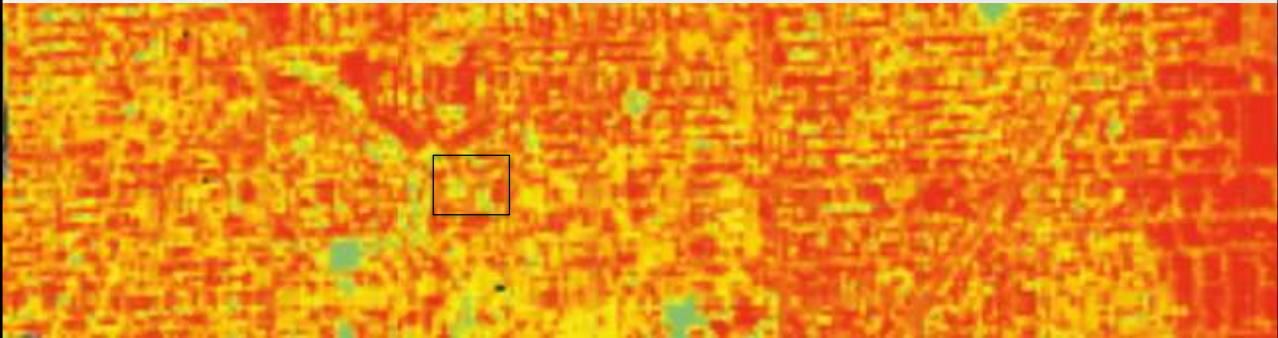
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Scenario 1: Business as usual infill plus tree planting



Land Surface Temperature



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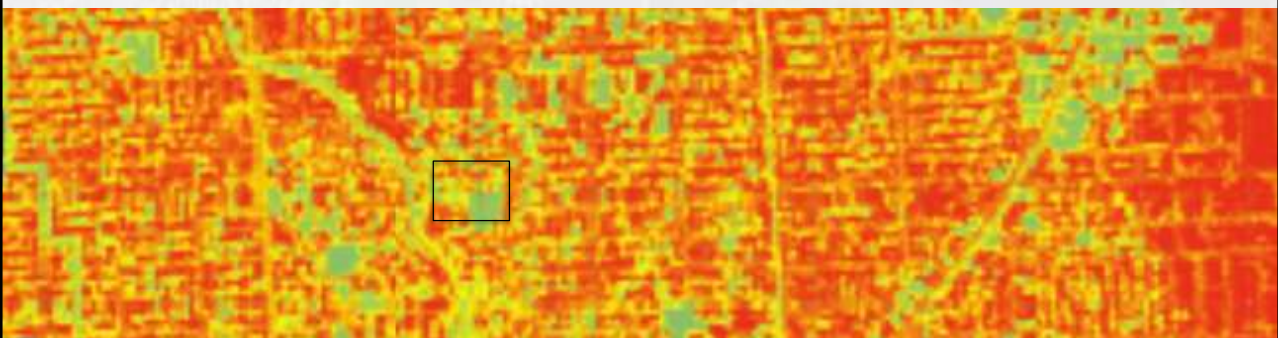
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Scenario 2: Greener, water sensitive approach New building types, Extra trees x 2 and irrigation



Land Surface Temperature



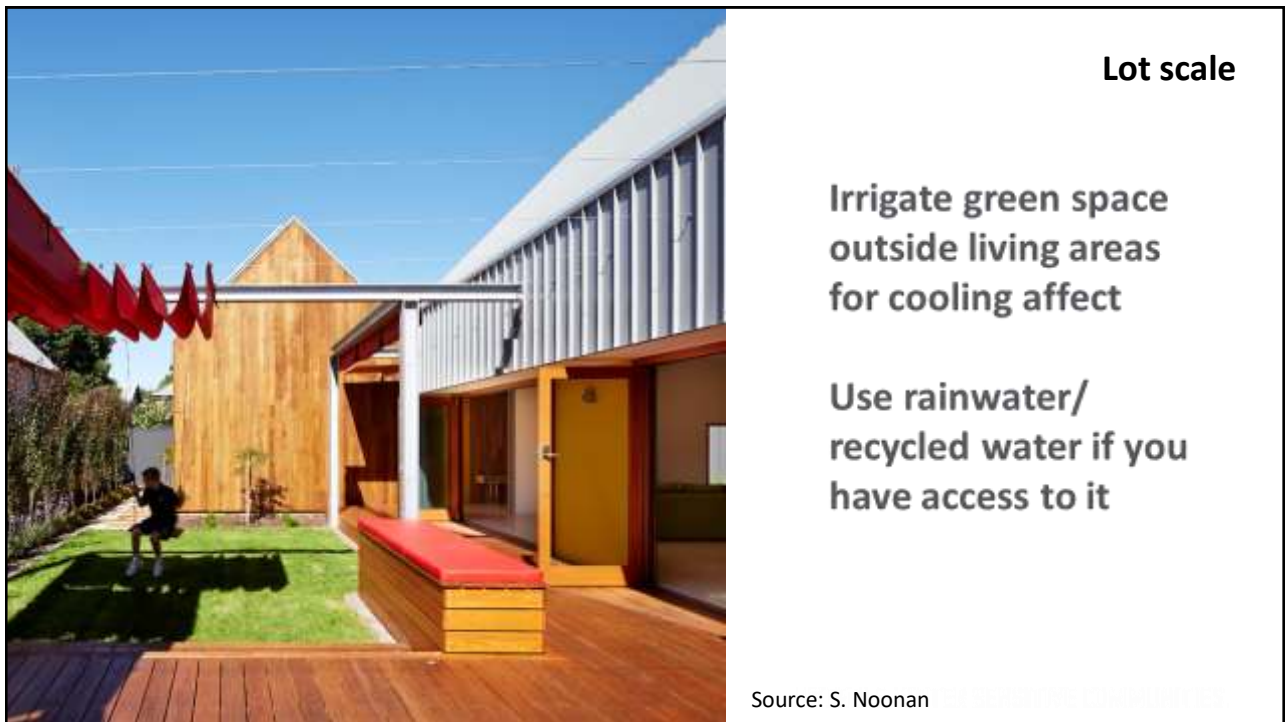
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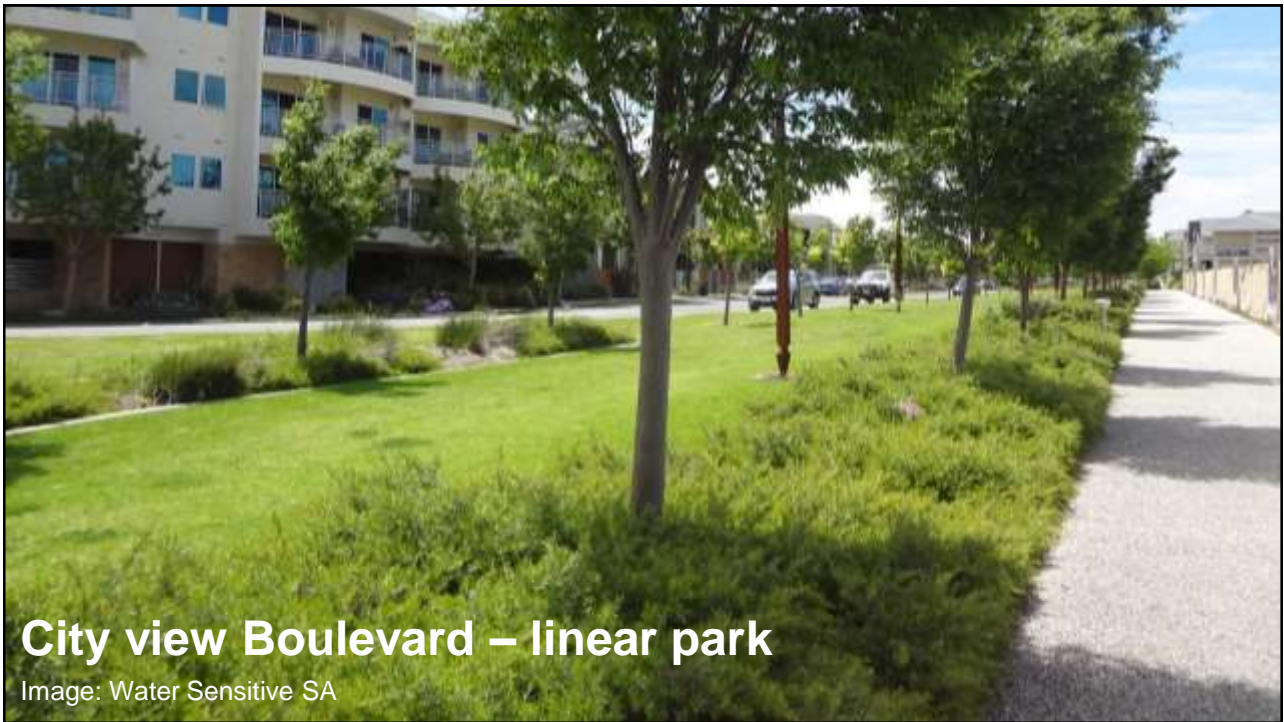
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