

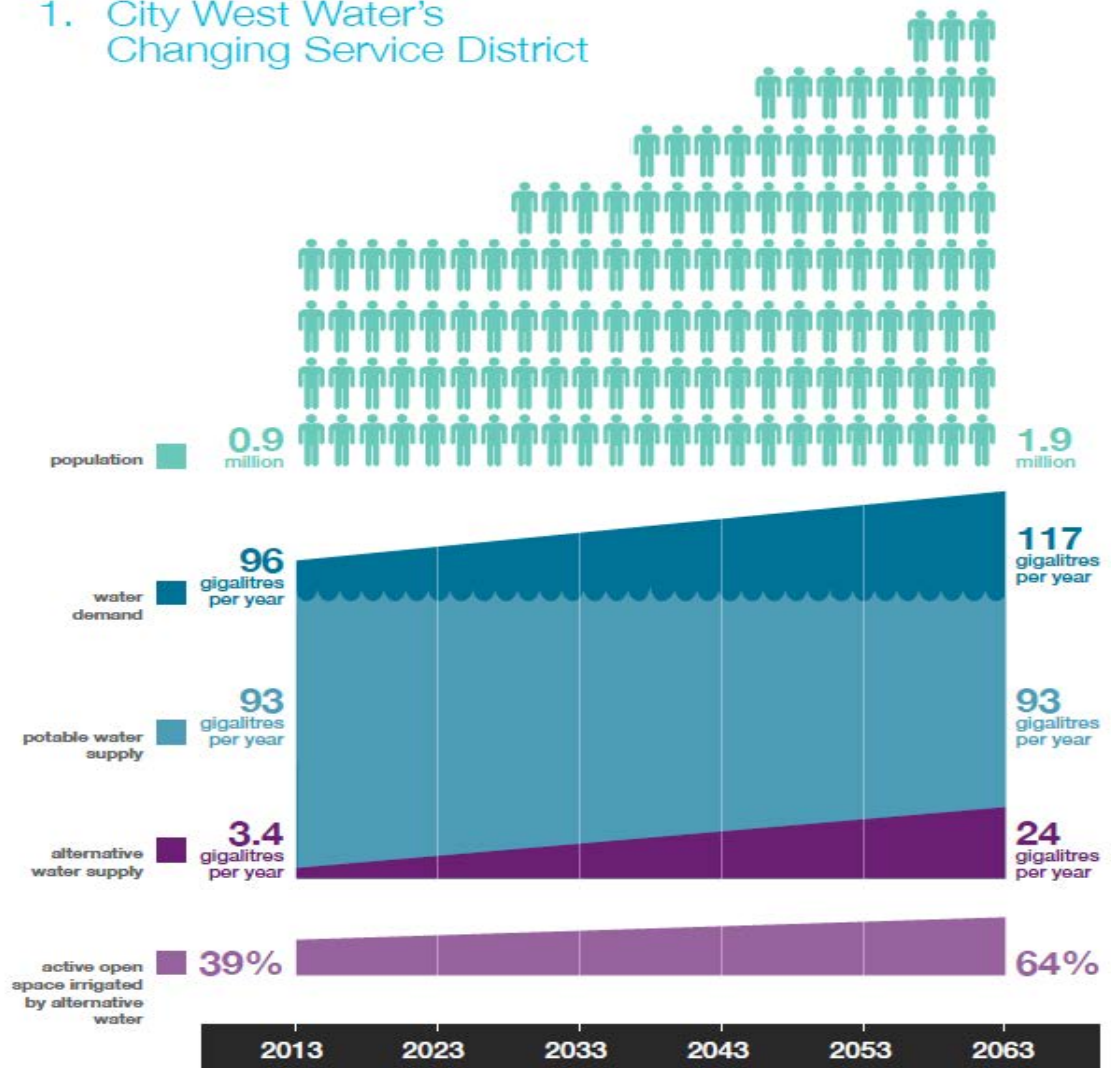
Greening the West in a changing climate



Meeting the needs of a fast-growing region

“A smart and resilient water system for a liveable, sustainable and productive Melbourne”

1. City West Water's Changing Service District



Integrated Water Cycle Management agenda

- Accommodate future growth without major supply augmentations
- Maintain water within the urban environment and provide environmental flows to waterways
- Integrate water cycle infrastructure – water supply, drainage, recycled water
- Ensure cost effective solutions
- Stakeholder engagement and community involvement in decision making

Key strategies

Growth areas

Water supply

Local stormwater harvesting for POS
Recycled water for residential irrigation, toilets and laundries
Recycled water for suitable non-residential demands
Potable water for remaining demands
Seasonal variation managed through ASR
Explore potential for large scale SWH for reinjection into dual reticulation

Sewerage

Sewer mining at Ravenhall to produce recycled water
Remaining sewage and solids treated at WTP

Infill

Opportunities

Industrial substitution – Altona Recycled Water Project Stage 2
Central Zone Redevelopment – City North, Arden/Macauley, E-Gate, CBD
Dispersed redevelopment– East Werribee, Moonee Valley Racecourse, Maribyrnong Defense Site, Precinct 15, FCAD
Retrofit local stormwater harvesting for POS

Water Supply

Local water supply from sewer Mining or SWH
Recycled water for irrigation, toilets, laundries and cooling towers
Exploring bringing water from WTP to the city

***Greening the West vision:
to enable sustainable, liveable
and healthy communities
through urban greening***



Our project partners



Our agenda

- Mitigate against climate change and **reduce heat related illness**
- **Improve physical health** by creating opportunity for physical activity
- **Improve mental health** by creating healthy environments
- Provide a more **liveable environment** for all **the western suburbs** including the growth areas

Municipality	Brimbank	Hobsons Bay	Maribyrnong	Melton	Mooney Valley	Wyndham	Vic. Average
People not meeting physical activity guidelines	31.3% RANK 6	30.8%	25.9%	29.2%	27.3%	28.7%	27.4%
People overweight or obese	52.2%	56.5%	44.2%	58.2% RANK 9	45%	52.5%	48.6%
People with type 2 diabetes	6.7% RANK 7	3.2%	5.5%	9.3% RANK 1	3.1%	4.3%	4.8%
People not eating recommended amounts of fruit and vegetables	43.4%	46.6%	52.3%	54.9% RANK 9	41%	57.1% RANK 4	48.2%
Self-reported health fair or poor	25.5% RANK 1	21.3%	19%	23.4% RANK 6	19%	20.1%	18.3%



Whittlesea

Hume

Nillumbik

Melton

Brimbank

Yarra Ranges

Hobsons Bay

Wyndham

Greater Geelong

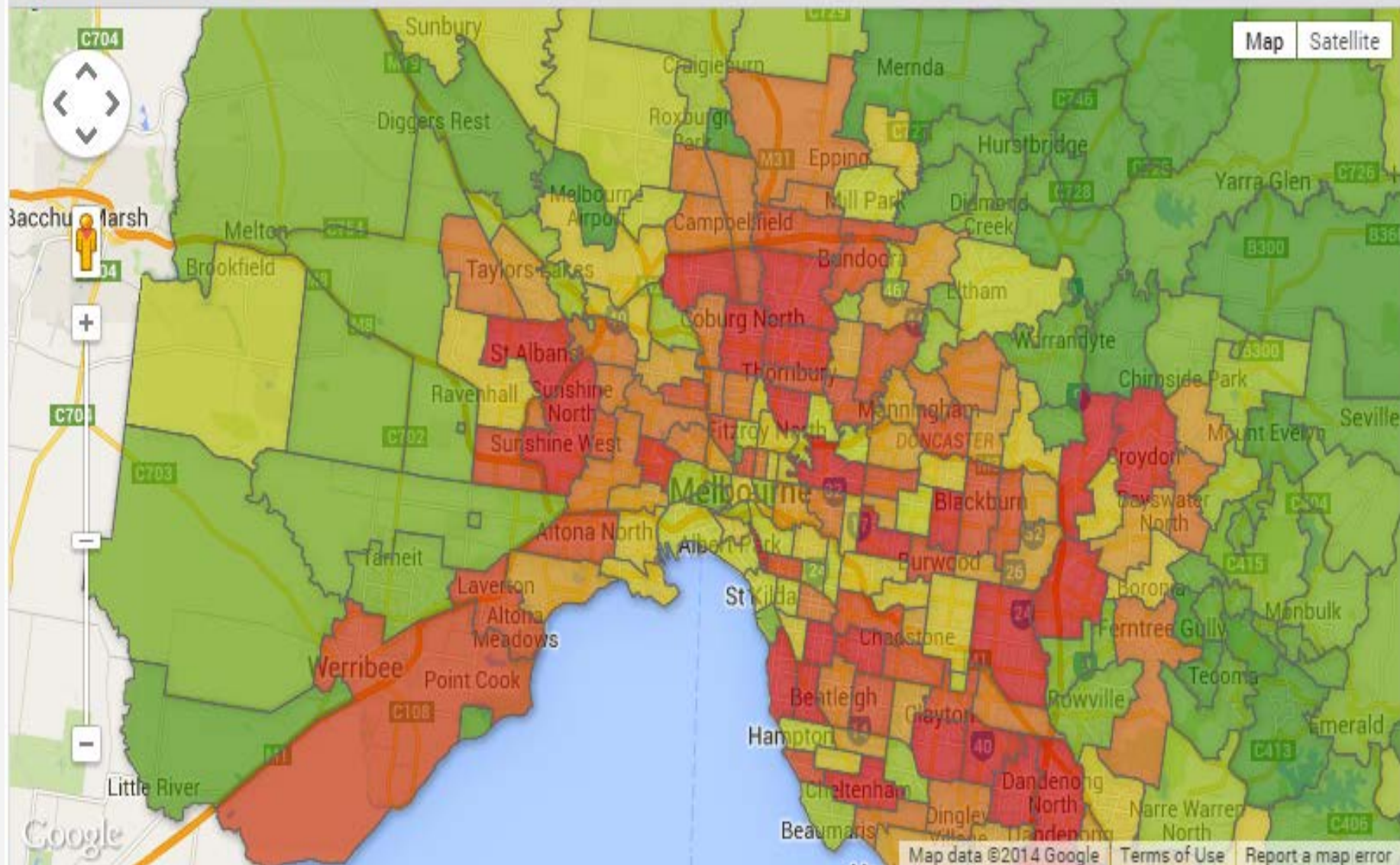
Cardinia

Casey

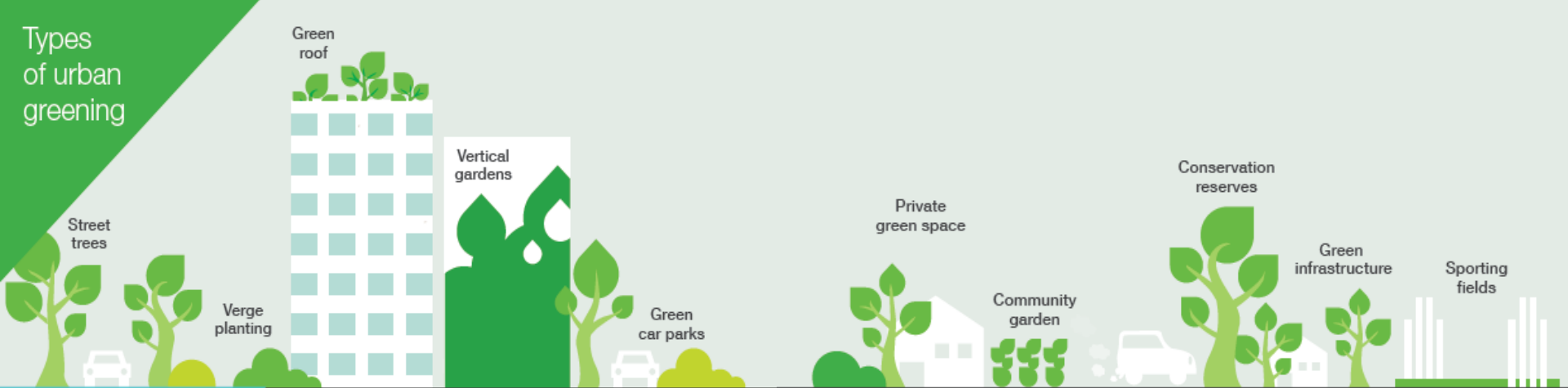
Frankston

Mornington Peninsula

Heat related Vulnerability Index



Types of urban greening



Benefits of urban greening

Environmental

Financial

Wellbeing

Stormwater mitigation and treatment

Urban greening reduces impervious surfaces and provides a low-cost alternative for stormwater treatment.

Biodiversity

Introducing a variety of native vegetation to the urban environment will provide habitat for our local fauna and increase biodiversity.

Social cohesion

Urban greening can increase the opportunity for social interactions through a shared interest in sport, gardening and conservation activities.

Carbon sequestration

Urban greening can assist in capturing and storing carbon and improve air quality by reducing fine particles in the atmosphere.

Increased property value

Tree-lined streets can increase property values by up to 9%.

Reduced electricity costs

Appropriately placed trees can provide thermal insulation and assist in reducing electricity costs generated through air conditioners.

Sustainable food source

Urban orchards and community gardens offer an accessible and sustainable food source for the public and encourages social interaction.

Increased sense of place and urban amenity

Trees can improve a community's sense of identity and pride.

Reduced temperature extremes

Shade, evapotranspiration and insulation provided by greening can assist in reducing the impact of extreme temperature events.

Encourage active lifestyle

Shade provided by street trees can encourage active transport and walkable neighbourhoods. Well-serviced parks offer opportunities for passive and active recreation.

Improved infrastructure life

Vegetation can reduce UV exposure, which in turn can increase the longevity of infrastructure such as roads and footpaths.

Improved air quality

Leaves capture and hold pollutants preventing them from remaining in the air. These are then washed away with rain (hopefully into raingardens, not into our waterways).

Types and benefits of urban greening

The logo for 'greening the west' features a stylized green leaf icon to the left of the text. The word 'greening' is in a bold, green, sans-serif font, and 'the west' is in a smaller, blue, sans-serif font below it.



Greening the West – a regional approach

Strategic Plan



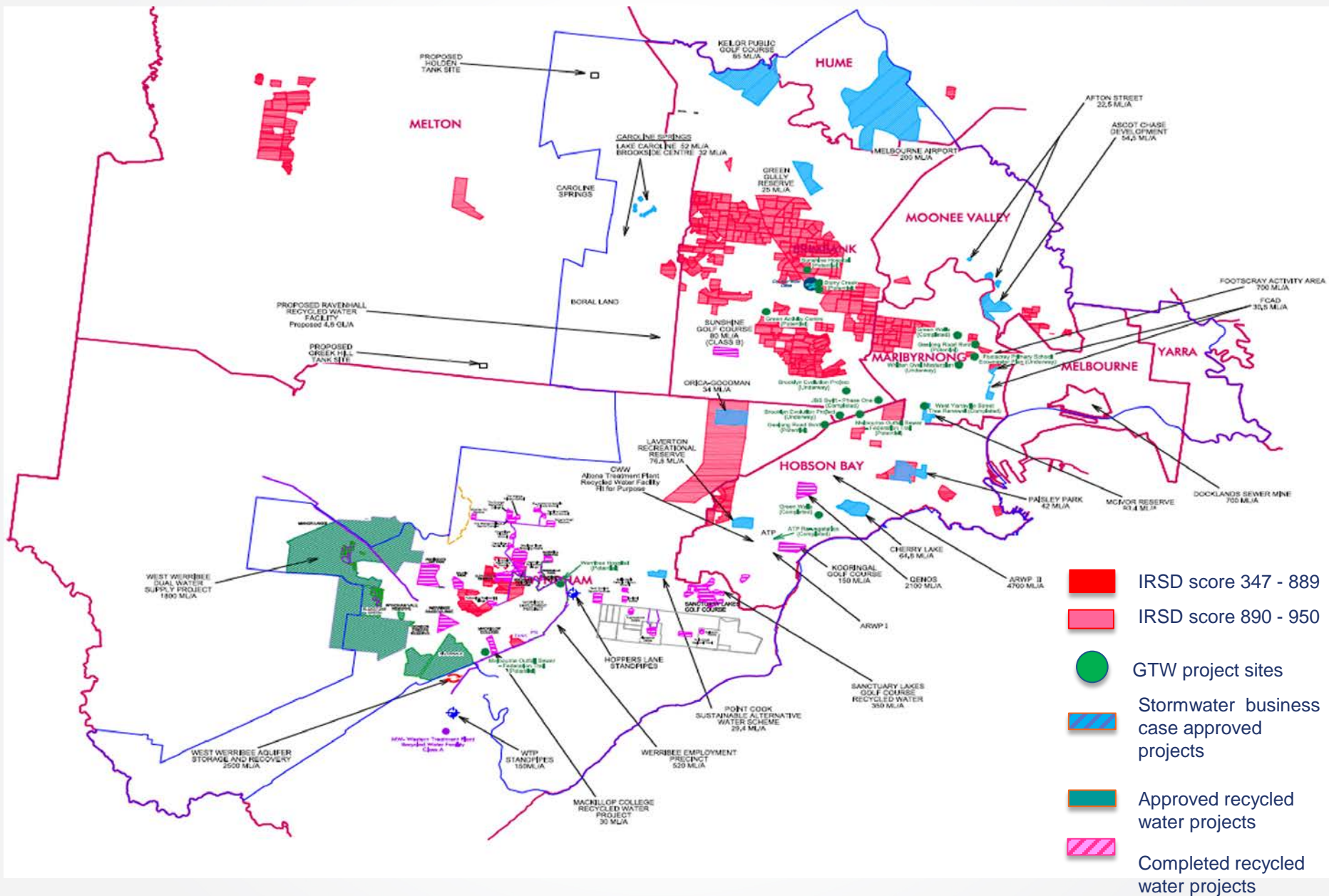
Goals	Targets
1. Maximise urban greening	<ul style="list-style-type: none"> • Double tree canopy cover in the west by 2050 • Green space to be increased by 25% by 2030
2. Improve quality and functionality of green space	Ensure quality and well-designed green open space for all communities
3. Increase the use and interaction of residents in green space	<ul style="list-style-type: none"> • All residents to have access to quality green space within 400 – 500 metres from their home • Enhance the range of facilities to maximise use and participation • Increase tree canopy cover to improve connectivity between open spaces and create urban habitat corridors
4. Improve the health and social wellbeing of residents	Improve the health indicators of the west

Goals	Targets
5. Showcase the economic and intrinsic value of urban green space	Create a business case for each green space project
6. Improve environmental quality	Create benchmark standards for stormwater quality, air quality, natural habitats and heat stress
7. Advocate green spaces to all levels of government and key stakeholders	<ul style="list-style-type: none"> • Annually showcase five Greening the West projects • Increase engagement and investment from stakeholders and government bodies • Lobby all levels of government and stakeholders to maximise greening outcomes • Each council to establish a tree protection overlay
8. Maximise sustainable water supplies to establish and maintain green space	<ul style="list-style-type: none"> • Identify opportunities for alternative irrigation of green space • 25% increase in supply of alternative water for green space by 2030

Planning plus action

- Existing **complementary programs and strategies** – street trees, parks etc
- Pilot sites – green walls, Geelong Road, Ardeer Activity Hub
- Links to **precinct wide programs** – Living Brooklyn industrial estate
- Supporting **funding applications** and **leveraging support** from state and federal agencies – 2 Million Trees, 20 Million Trees & Green Army
- Influencing **new developments**
- **Partnering with research institutions** – academics and students
- **greeningthewest.org.au** – new website to be launched soon





Green Gully Reserve







Three top tips

- The power of one

A regional alliance or consortium can wield more influence than individual organisations alone. Attractive to potential funding bodies who seek big broad outcomes

- Research networks

- Universities offer myriad of helpful experts, opportunities for field studies and student projects

- Build an advocacy base

- Involve many players, discuss ideas and don't forget your internal advocates