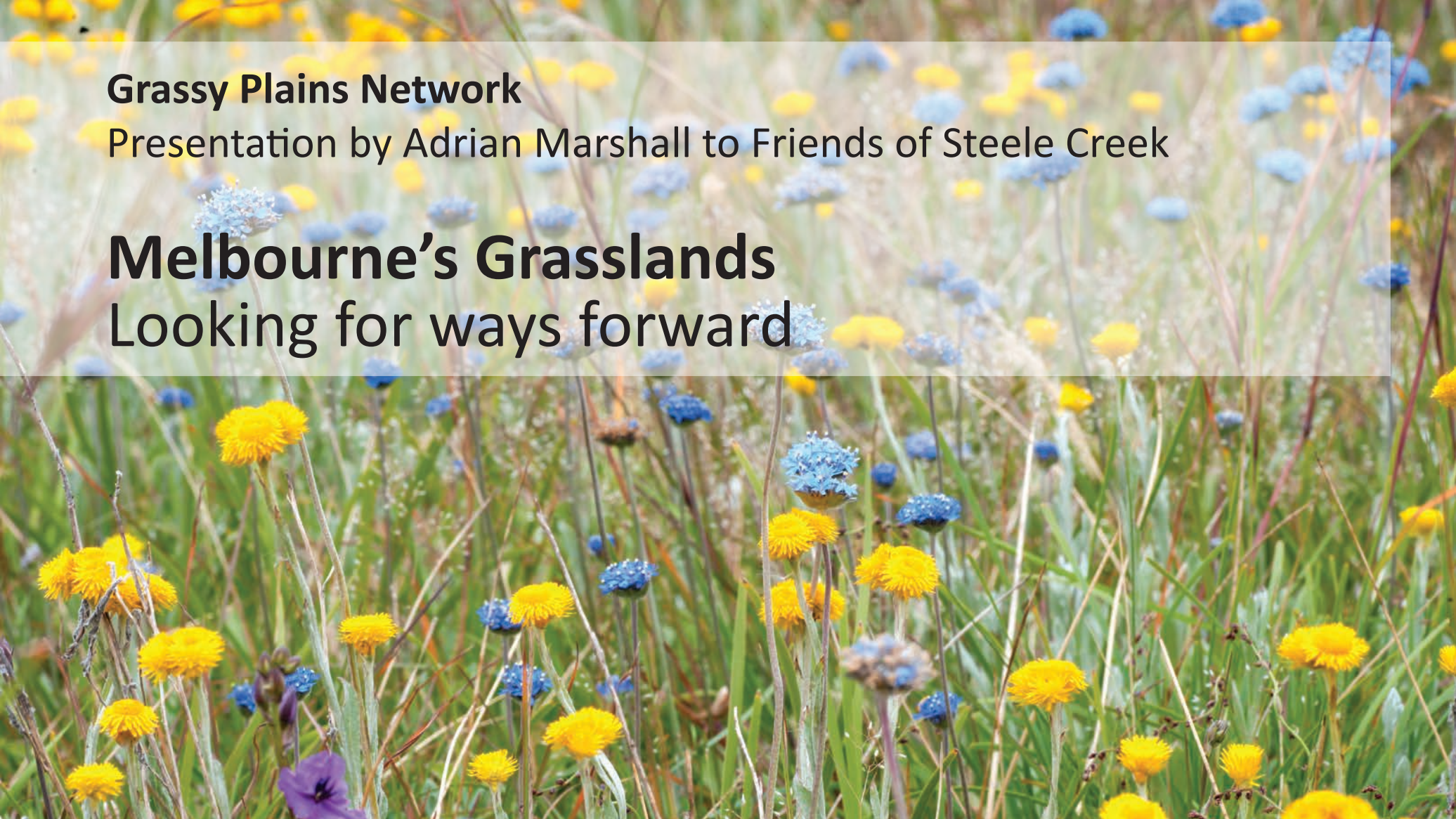


Grassy Plains Network

Presentation by Adrian Marshall to Friends of Steele Creek

Melbourne's Grasslands

Looking for ways forward

The Grassy Plains Network

- Founded in 2018
- We are land management professionals, academics, ecologists and community concerned about the ongoing decline of grassy ecosystems across Melbourne and its surrounds.
- Collectively, we have worked at every level of government, across all of Melbourne's north and west, in Landcare, CMAs and in dozens of community and environmental organisations.

This presentation

- Some grasslands!
- Grasslands are critically endangered
- Melbourne's grasslands:
  - The Western Grassland Reserves
  - The growth areas
  - Urban grasslands
- What we can be doing

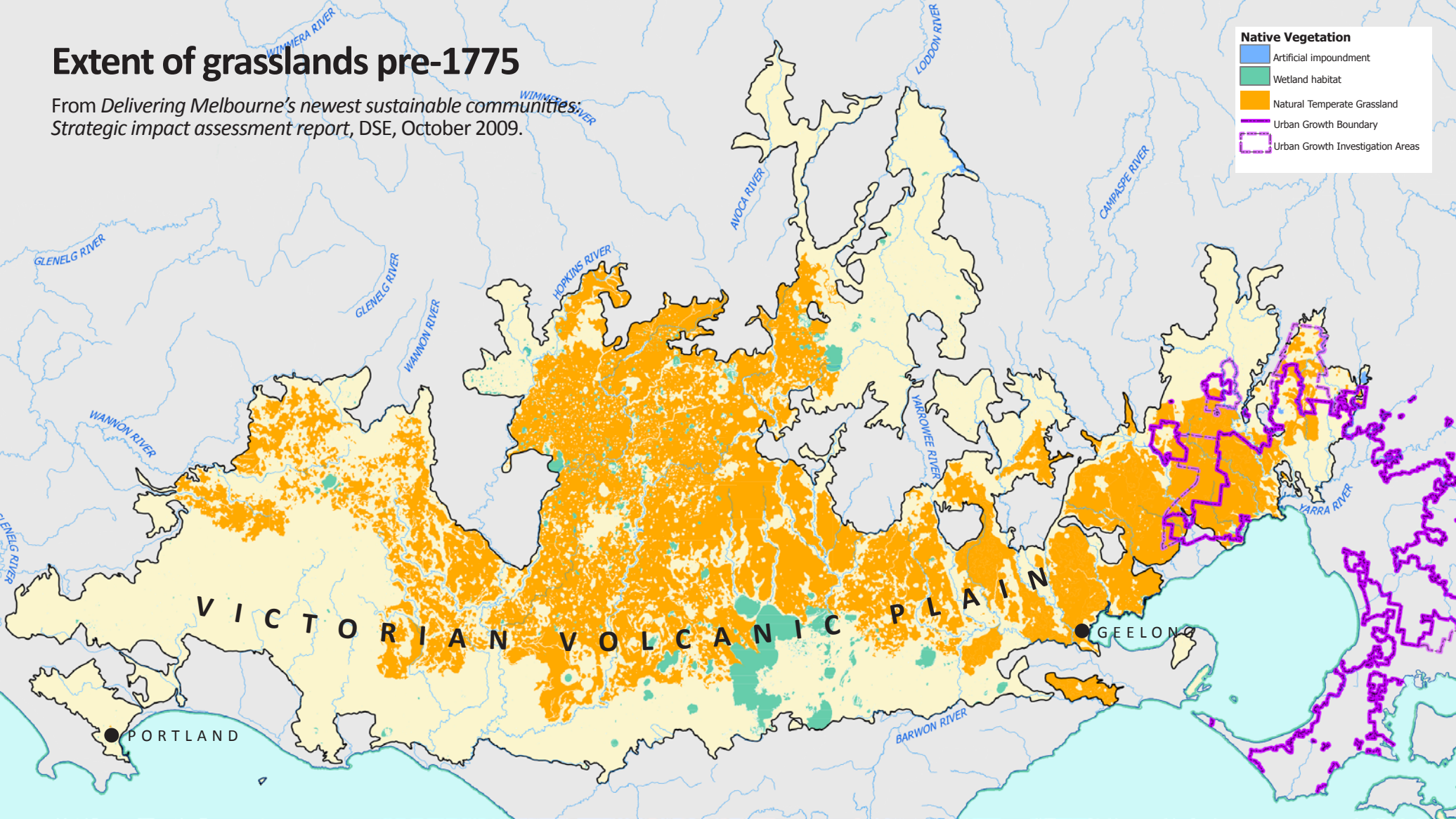
Less than 2% remain

Native grasslands are one of Australia's most endangered ecosystems

- Critically endangered under the Federal EPBC Act
- Threatened under Victoria's Flora and Fauna Guarantee Act

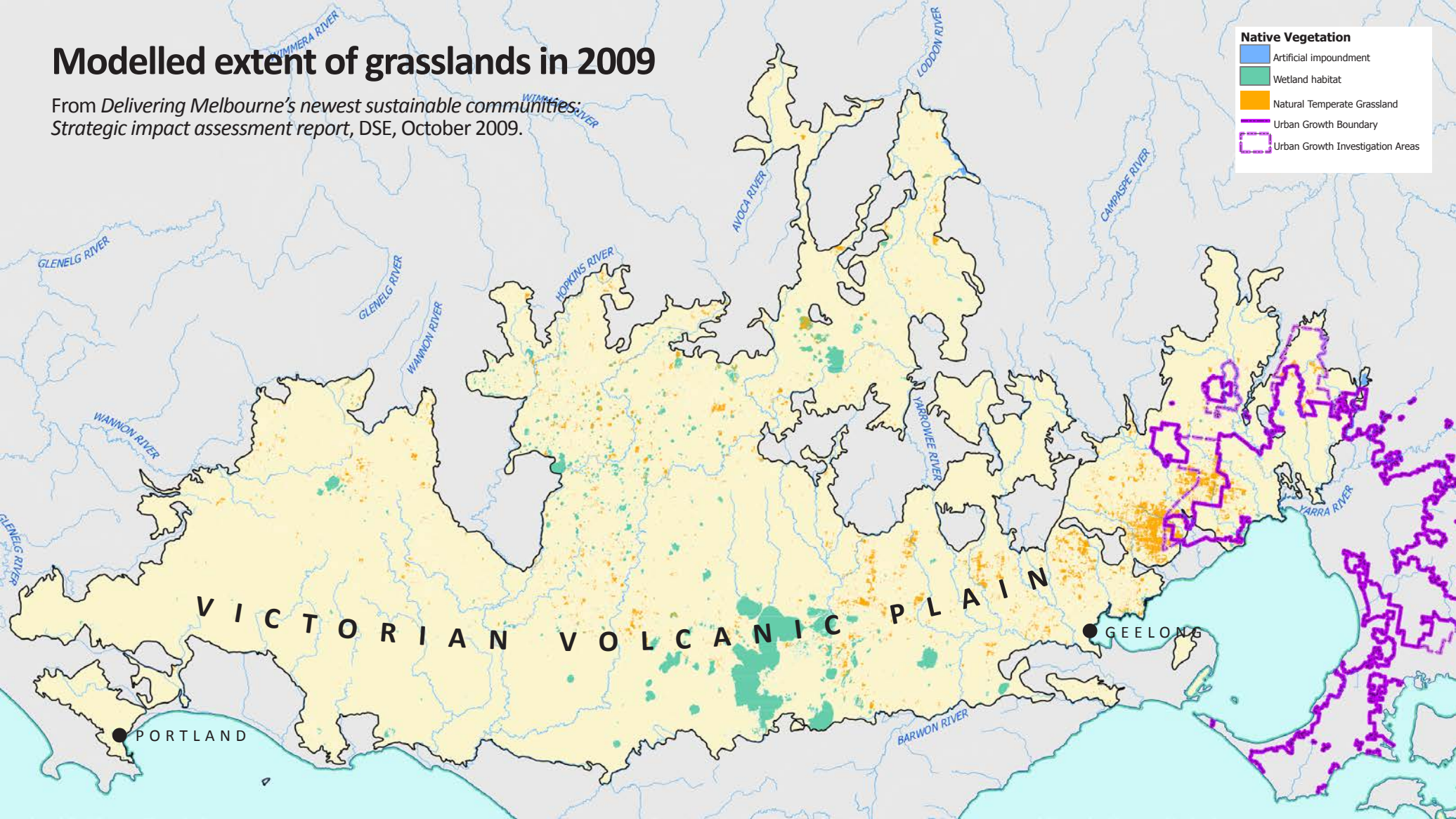
Extent of grasslands pre-1775

From *Delivering Melbourne's newest sustainable communities: Strategic impact assessment report*, DSE, October 2009.

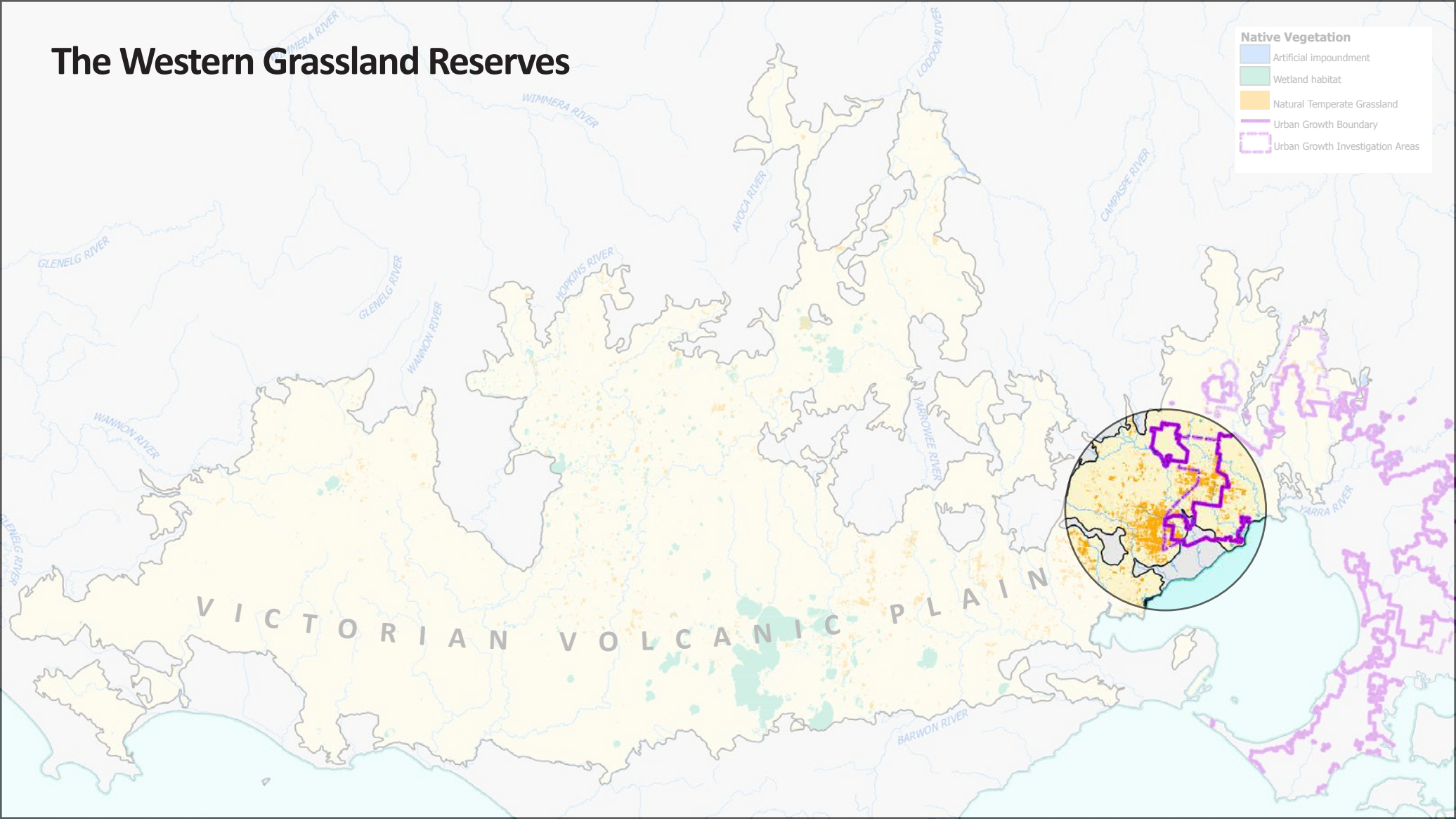


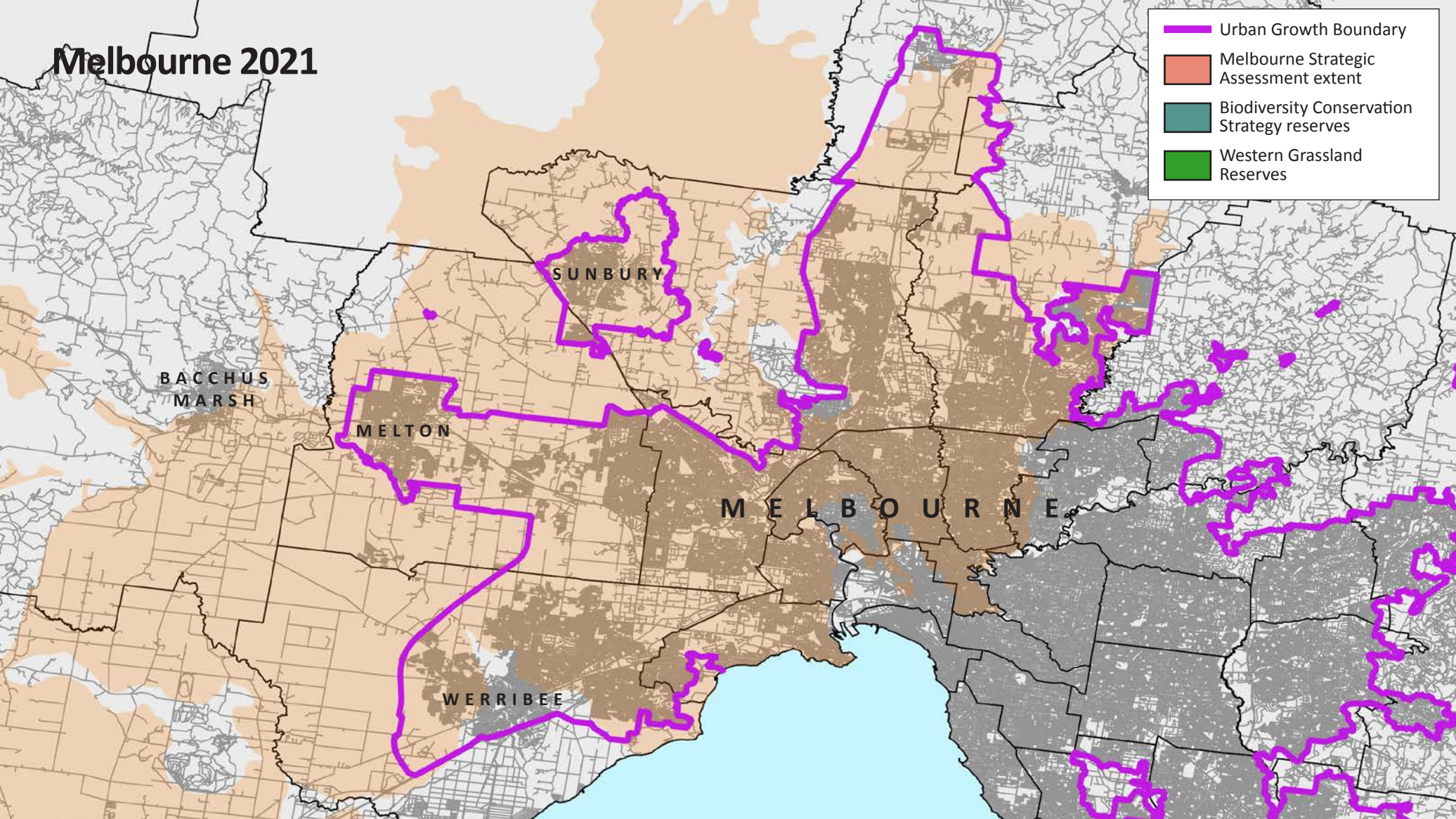
Modelled extent of grasslands in 2009

From *Delivering Melbourne's newest sustainable communities: Strategic impact assessment report*, DSE, October 2009.

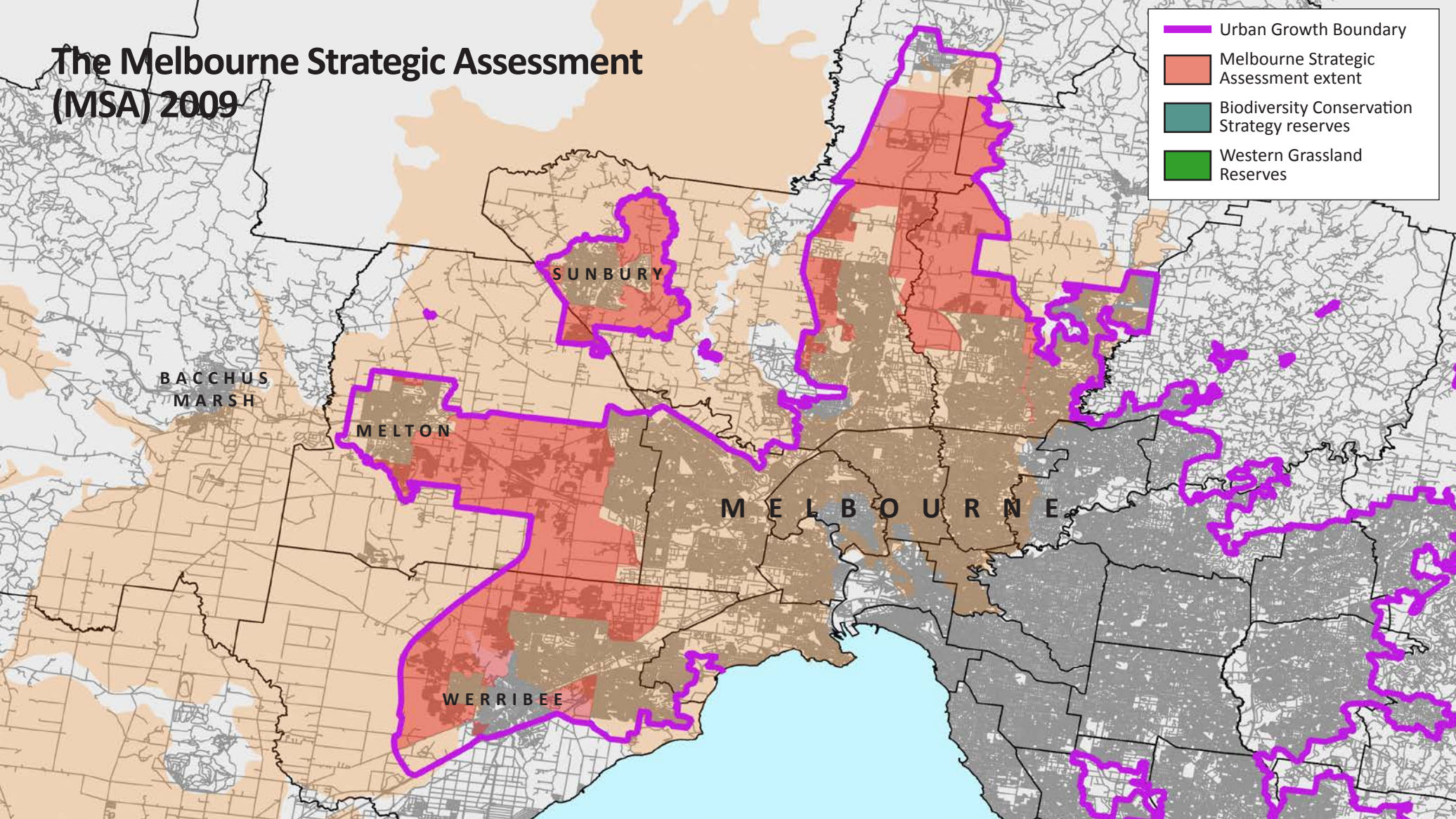


The Western Grassland Reserves

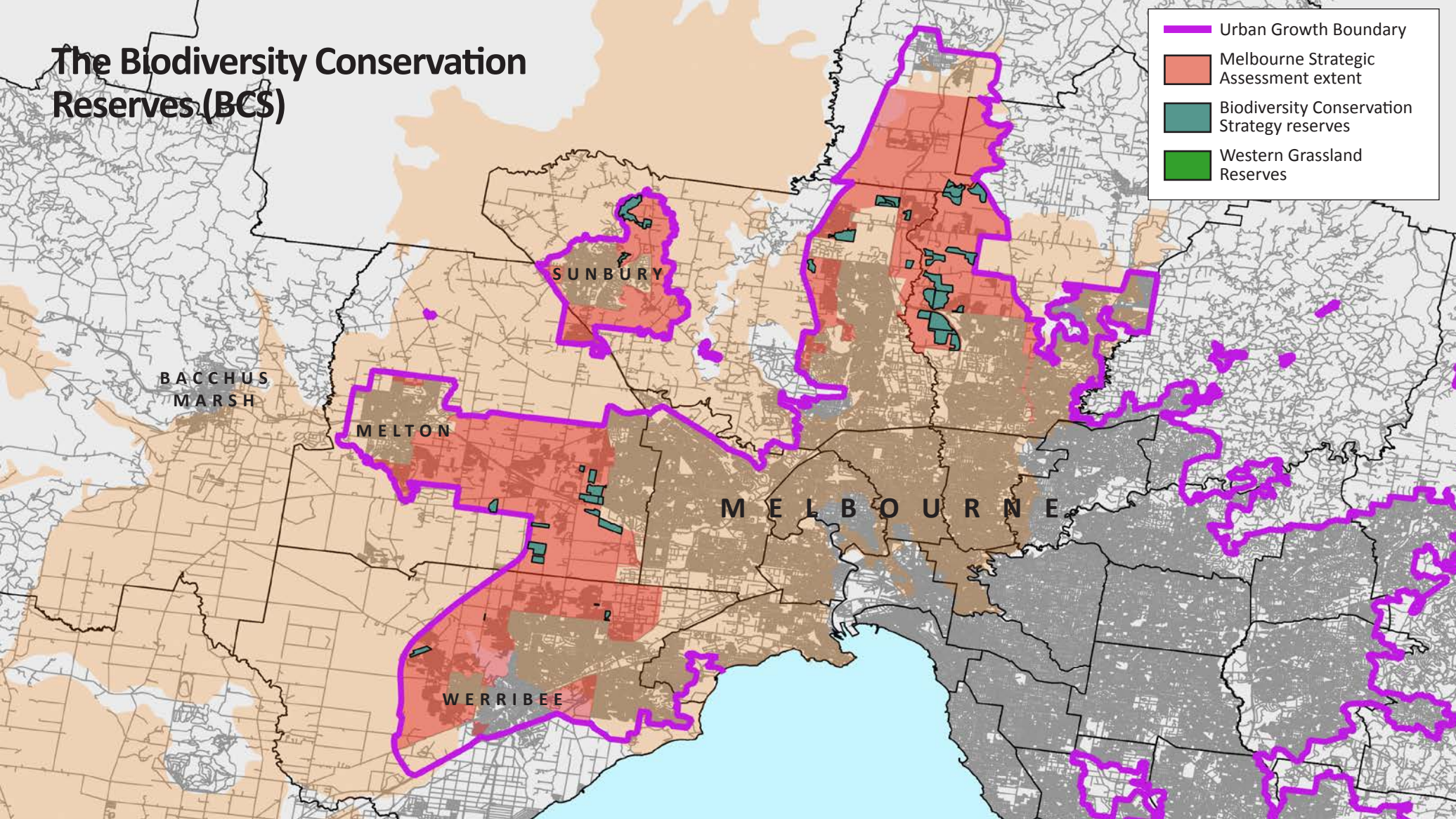


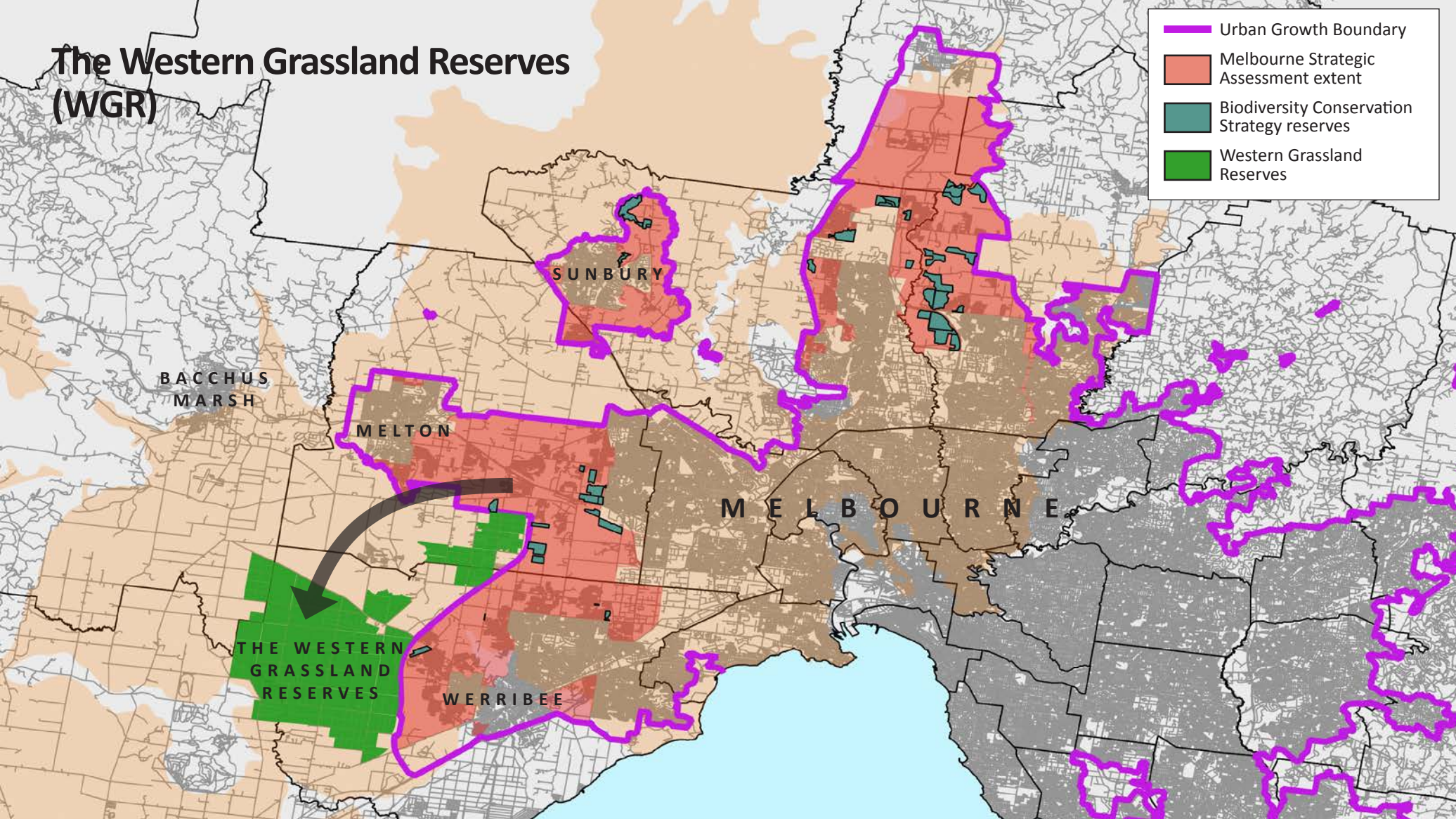

Melbourne 2021
Urban Growth Boundary
Melbourne Strategic Assessment extent
Biodiversity Conservation Strategy reserves
Western Grassland Reserves
SUNBURY
BACCHUS MARSH
MELTON
MELBOURNE
WERRIBEE

The Melbourne Strategic Assessment (MSA) 2009



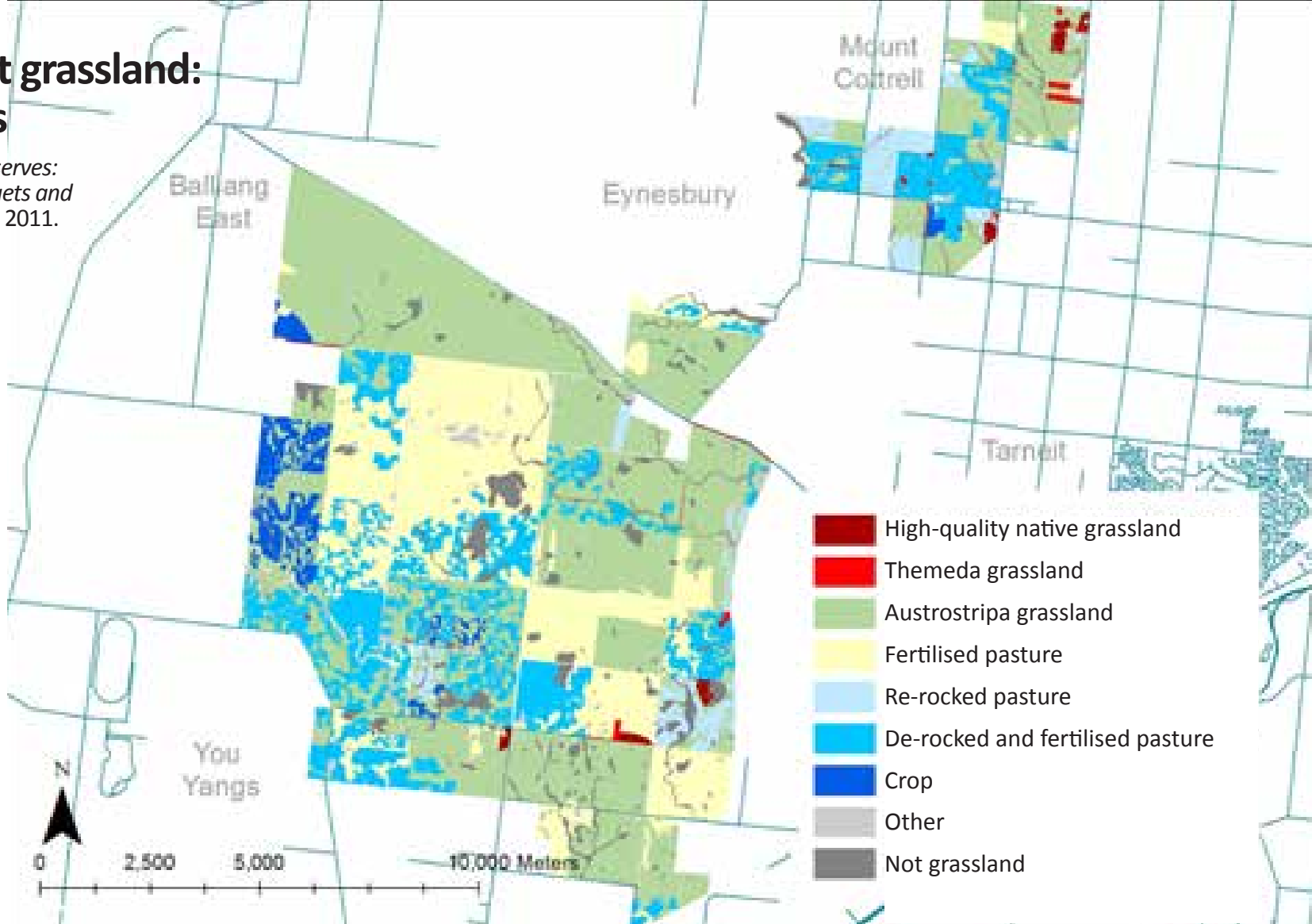
The Biodiversity Conservation Reserves (BCS)




The Western Grassland Reserves (WGR)
Urban Growth Boundary
Melbourne Strategic Assessment extent
Biodiversity Conservation Strategy reserves
Western Grassland Reserves
SUNBURY
BACCHUS MARSH
MELTON
MELBOURNE
THE WESTERN GRASSLAND RESERVES
WERRIBEE

Grassland is not grassland: Quality matters

From *Western Grassland Reserves: Grassland management targets and adaptive management,* DSE, 2011.



Failings of MSA highlighted in Auditor General's report

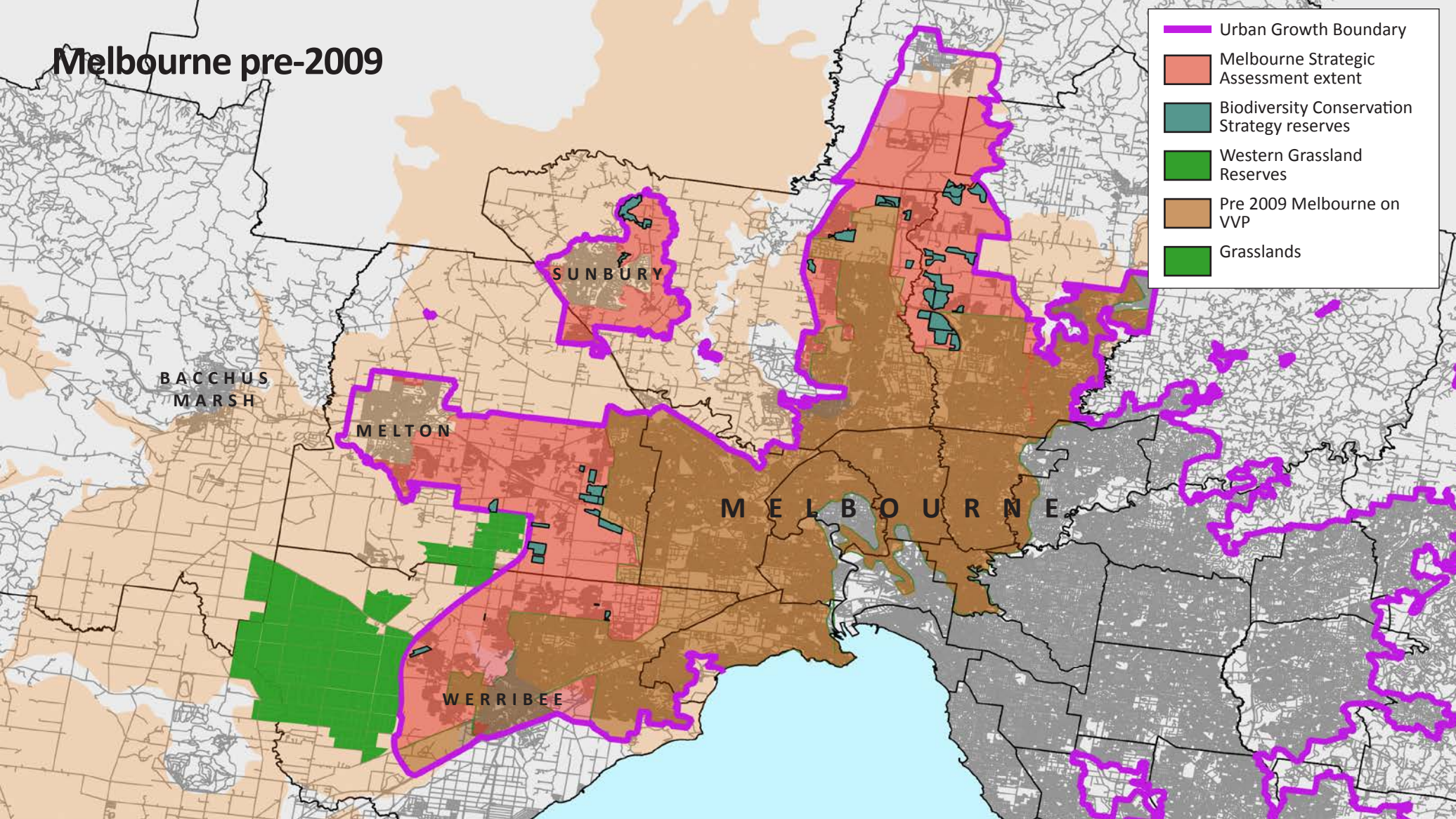
Damning Victorian Auditor General's Office (VAGO) report in 2020

- Only 10% acquired within promised 10-year timeframe
- Remaining 90% without appropriate interim management, which means weeds are overunning the grassland that's supposed to be protected.
- WGR subject to Public Acquisition Overlay (PAO) and Environmental Protection Overlay (EPO)
- Losing good quality grassland to purchase poorer quality grassland

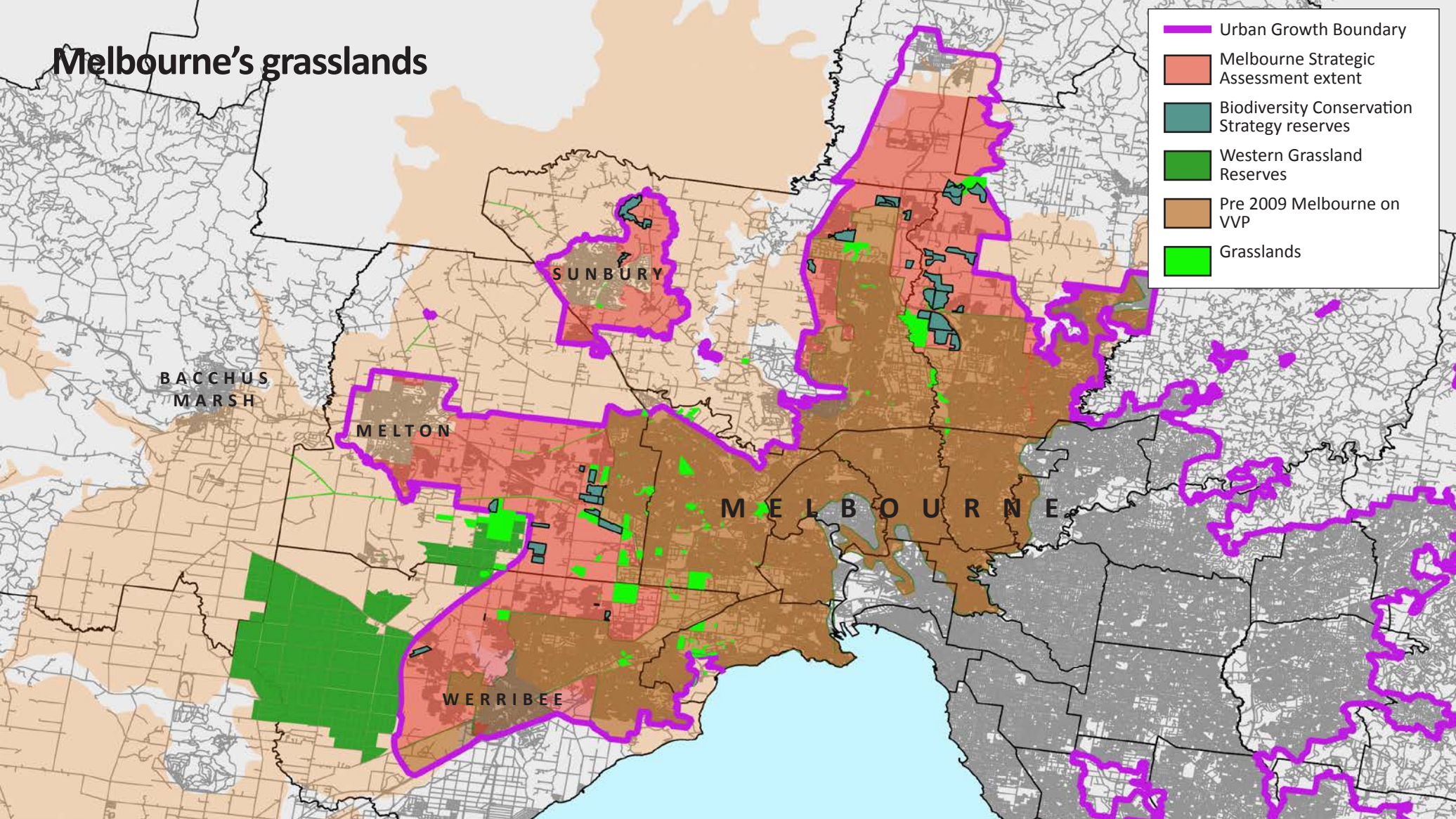
The growth area grasslands

Mostly the Biodiversity Conservation Strategy reserves plus a few grasslands already in public ownership

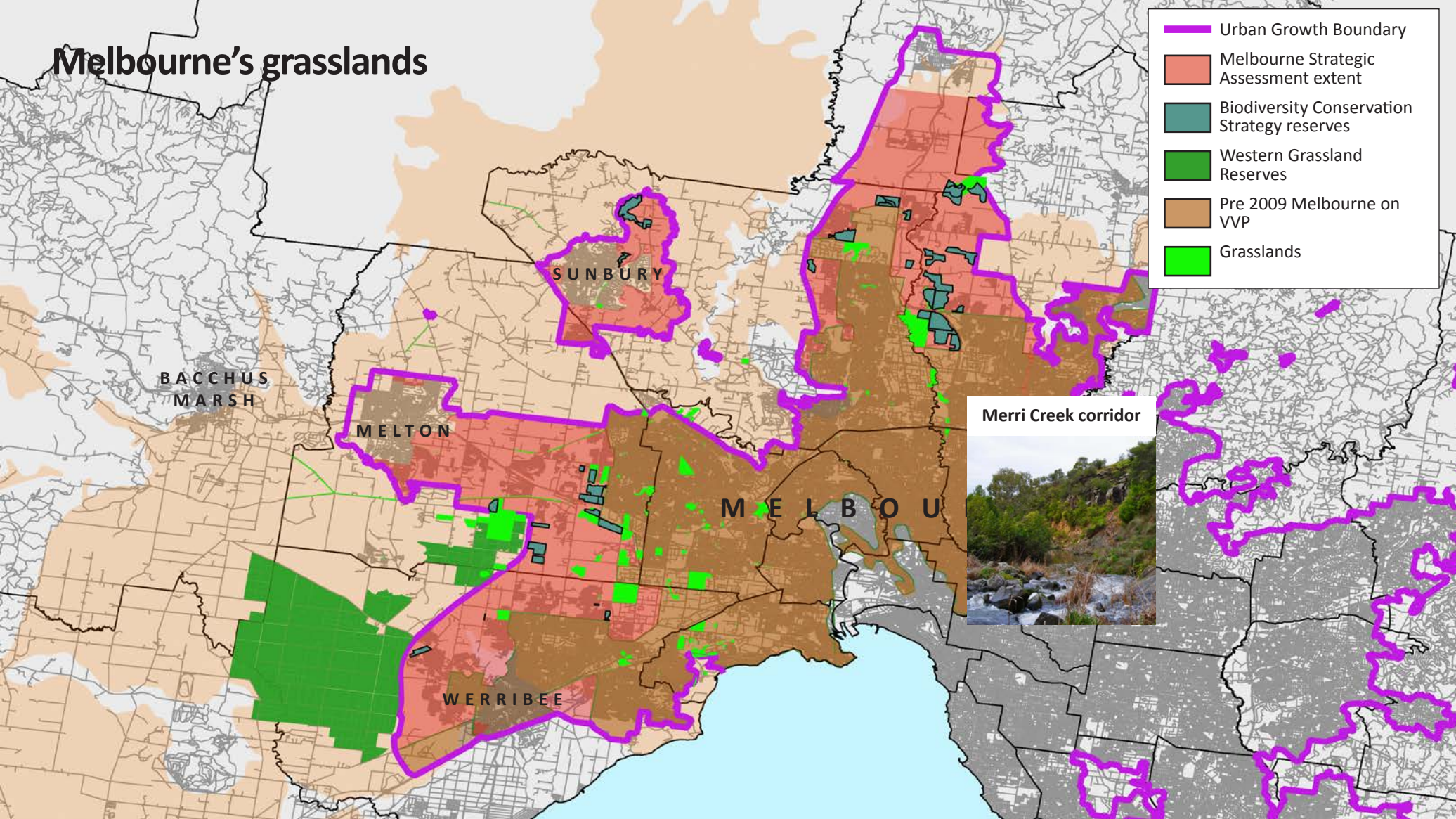
- The 43 BCS reserves are mostly not yet transferred to public ownership – e.g. the new suburban parks, Kororoit Regional Park
- On-going management arrangements not clear
- Like the WGR, they are continuing to decline from lack of interim management
- No other grasslands within the growth areas can be protected


Melbourne pre-2009
Urban Growth Boundary
Melbourne Strategic Assessment extent
Biodiversity Conservation Strategy reserves
Western Grassland Reserves
Pre 2009 Melbourne on VVP
Grasslands
SUNBURY
BACCHUS MARSH
MELTON
MELBOURNE
WERRIBEE

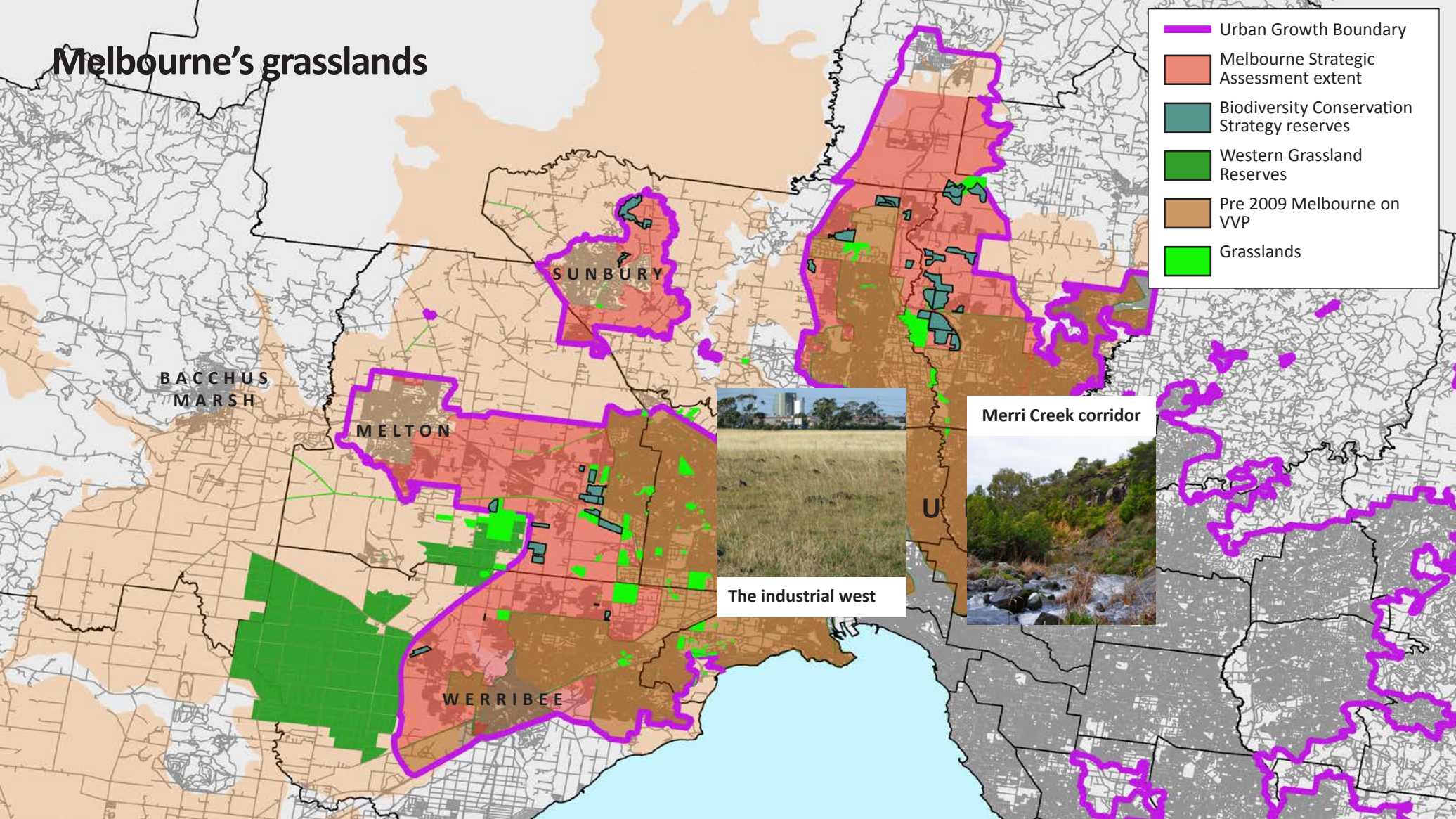
Melbourne's grasslands



Melbourne's grasslands

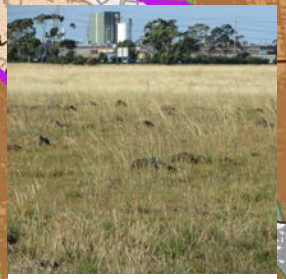


Melbourne's grasslands



Melbourne's grasslands

Residential context



The industrial west

Merri Creek corridor

BACCHUS MARSH

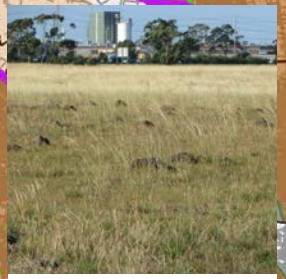
MELTON

WERRIBEE

- Urban Growth Boundary
- Melbourne Strategic Assessment extent
- Biodiversity Conservation Strategy reserves
- Western Grassland Reserves
- Pre 2009 Melbourne on VVP
- Grasslands

Melbourne's grasslands

Residential context



The industrial west

Merri Creek corridor

Pioneer cemeteries

BACCHUS MARSH

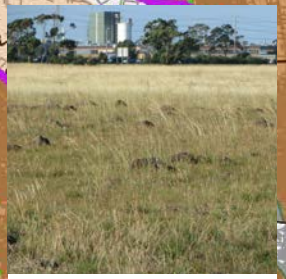
MELTON

- Urban Growth Boundary
- Melbourne Strategic Assessment extent
- Biodiversity Conservation Strategy reserves
- Western Grassland Reserves
- Pre 2009 Melbourne on VVP
- Grasslands

Melbourne's grasslands

Residential context

Rail corridors



The industrial west

Merri Creek corridor

Pioneer cemetaries

- Urban Growth Boundary
- Melbourne Strategic Assessment extent
- Biodiversity Conservation Strategy reserves
- Western Grassland Reserves
- Pre 2009 Melbourne on VVP
- Grasslands

Many land uses, many land owners, many contexts

- Waterways: Located with other natural assets, linear parks and pathways
- Industrial: Can be locked up. What's the view from a freeway?
- Residential: Need to engage, pressure to look good
- Cemeteries: Rare but highly significant
- Rail lines: Pressure from upgrades, difficult to work on

Big is not better, small can be beautiful

- Many small patches are very diverse, with citically endangered species
- Majenta Storks Bill only found in a single reserve in the City of Hume. Threat of local extinction. That's the case for 91 species.
- In Hobsons Bay at least 67 plant species have become locally extinct. Thirty-seven plant species within Hobsons Bay are endangered, vulnerable, rare or poorly known at state level
- We don't know what used to be there

What do we want to achieve?

Protection

- Purchase of good quality remnant
- Legal mechanisms such as ESOs
- Good management, e.g. regular biomass reduction, weed management

Provide cues to care

Restoration

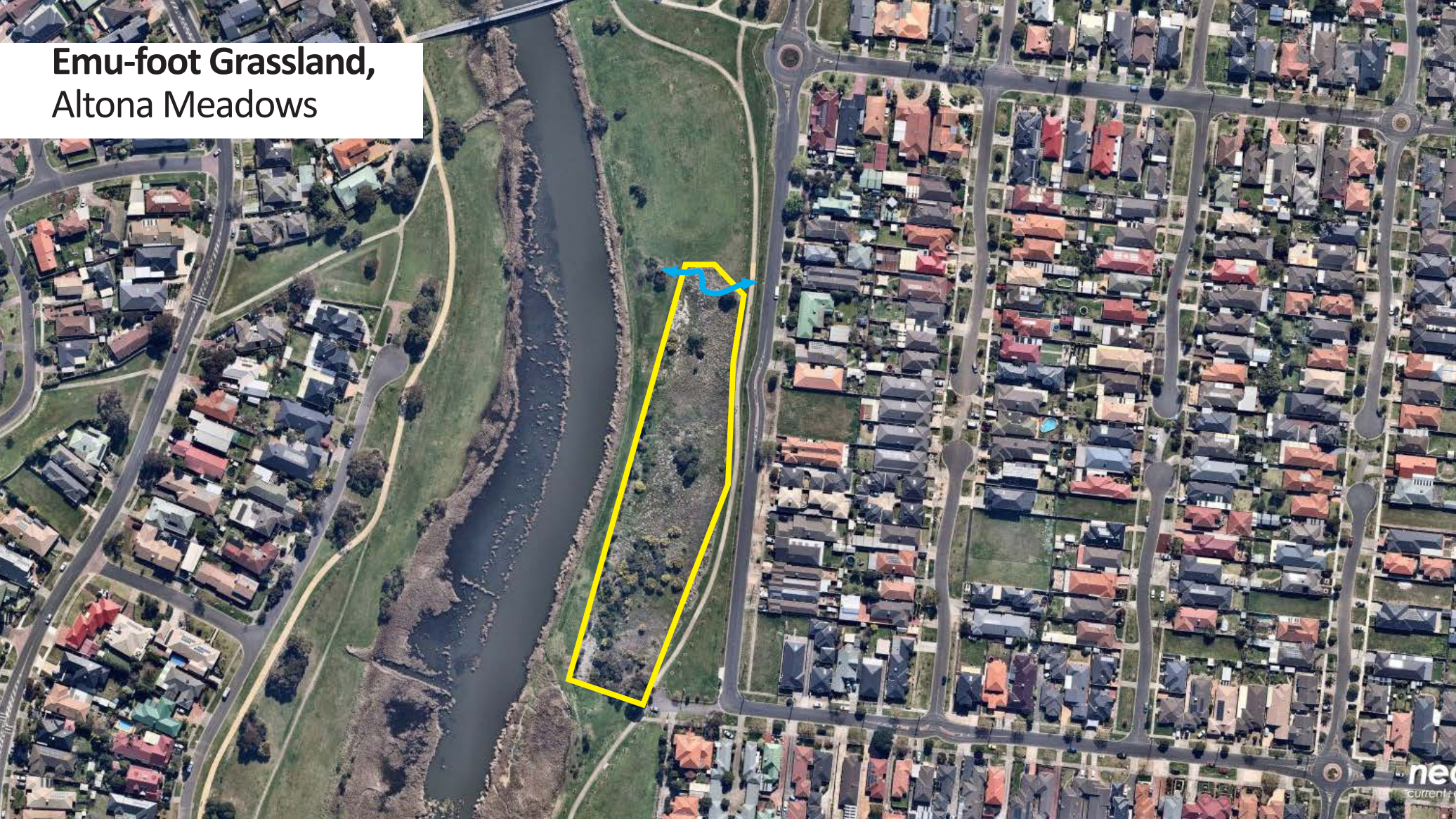
- Return of ecosystem function

Engagement

- Get people in to see
- Friends
- Community
- Education

Vision

- City-wide and State-wide governance
- Ownership and identity

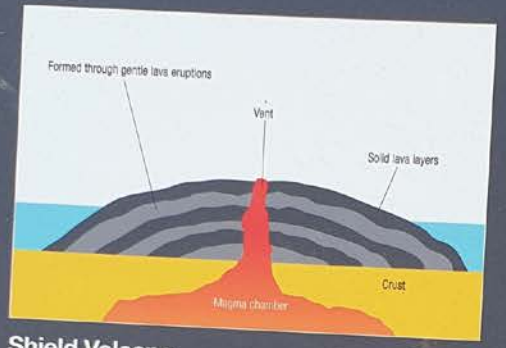

Emu-foot Grassland,
Altona Meadows

Victoria's Great Basalt Plain

Imagine standing here a million years ago, watching as the fiercely hot lava flowed through the wooded countryside burning all in its path before it cooled and hardened into basalt rock. Basalt is called "igneous" rock from the Latin word for fire.

Look around today to see the rocks forming part of the ground. Can you see the small holes in the grey rock where steam escaped as the lava cooled?

About 400 volcanoes between Melbourne and the South Australian border created the world's third largest volcanic plain and grassland. The liquid rock flowed from the volcanoes over the surrounding country filling in any depressions. Later, rivers and creeks cut new valleys.



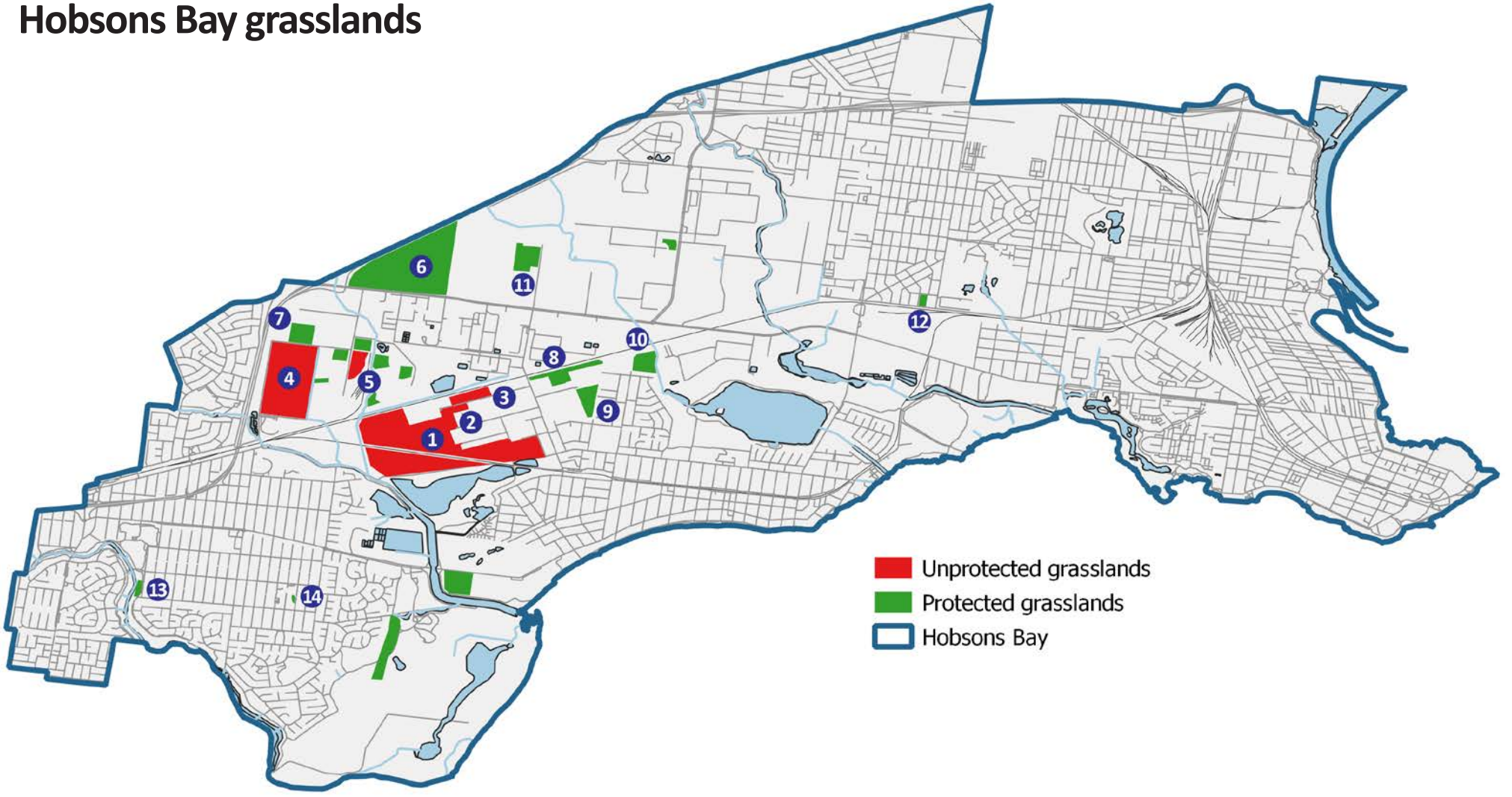
Shield Volcano
The lava from shield volcanoes is very runny, allowing it to spread a long way. These volcanoes have gentle slopes and most do not get very tall. They only explode when water gets into the vent.

Mount Cottrell
Mt Cottrell formed the Werribee Basalt Plain around one million years ago. It was the most active of the volcanoes (dots) with its lava flowing over the landscape for 20 kilometres. At only 200 metres high it may not meet your expectations of a volcano, as the cone has weathered down over time.

What Became of th
After destroying every
years ago, the lava c
grey rocks. Over time
cracked and eroded
scattered boulders yo

EMU-FOOT
GRASSLAND
0.01 PER CENT
VARIETY OF
RARE SPECIES
GRASSLANDS
CAN HELP

Hobsons Bay grasslands



Solomon Heights

- Industrial zoned
- large (37 ha) Themeda-dominated paddock on the Maribyrnong escarpment
- 433 individual unserviced land parcels in Solomon Heights Estate
- Neighbouring River Valley Estate
- Brimbank council, DELWP, Federal Government, Melbourne Water
- Airport Rail Link

LET'S SAVE SOLOMON HEIGHTS

Golden Sun Moth

GRASSLAND NATURE FOR ALL OF US

What you can do for Solomon Heights

- Find out more at grassyplains.net.au/solomonheights
- Show Council you care: write a letter (examples on our website)
- Print out and put up a poster or two
- Help us letterbox
- Spread the word
- Join our newsletter at grassyplains.net.au
- Follow us on Facebook

Best Melbourne grasslands to visit

- Evans St, Sunbury (opposite corner of Timmins St and Evans Street)
- Old Truganina Cemetery, 121 Woods Rd, Truganina
- Emu Foot Grassland, Altona Meadows (where Spicer Boulevard meets Skeleton Creek)