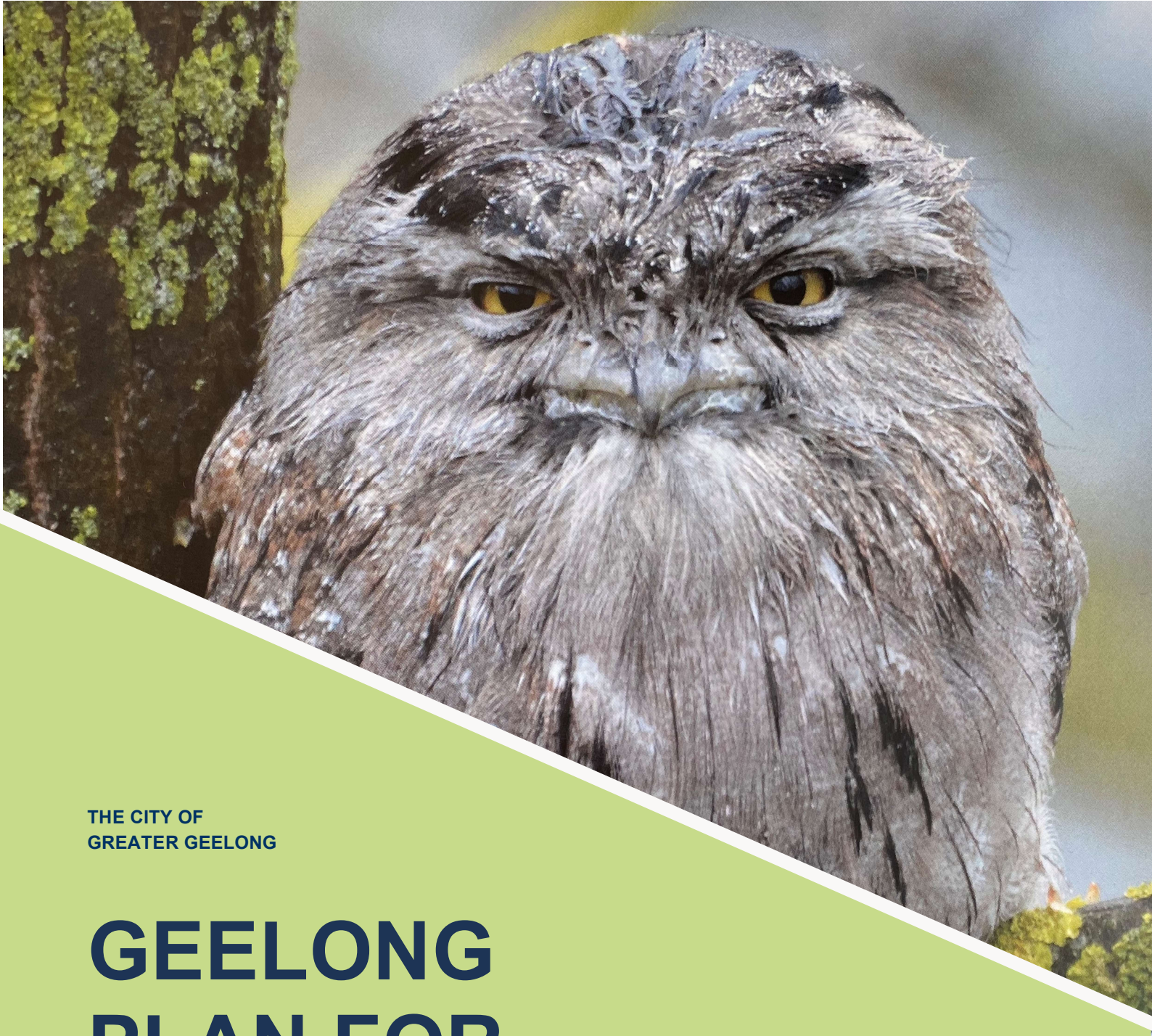

THE CITY OF
GREATER GEELONG

GEELONG PLAN FOR NATURE

2026-36

CITY OF GREATER
GEELONG

Contents

Acknowledgement of Country 4

Executive Summary.....5

Introduction.....8

How we engaged.....13

Drivers of change 16

Strategic Direction.....22

Landscapes: Values, Threats and Opportunities 26

Across Djilang.....27

Barwon Plain.....28

Bellarine 29

Basalt Plains 31

Geelong City Landscape 32

Little River.....34

Northern Uplands 36

Goal 1: Value Wadawurrung Country and Culture.....40

Goal 2: Prioritise protection.....41

Goal 3: Connect and restore 45

Goal 4: Foster stewardship and strong partnerships.....49

Goal 5: Build resilience to a changing climate 52

Action Plan.....56

Implementation and renewal.....61

Monitoring and evaluation 63

MAPS 1-6: Environment Values 65

MAPS 7-12: Environmental Values 71

MAPS 13-18: Protection Measures 77

Appendix 1: Threatened Species and Ecological Communities Summary.....84

Appendix 2: Threatened Species and Ecological Communities.....86

Appendix 3: Environment Volunteer Groups and Networks 90

Appendix 4: Biolink Areas.....92

Acknowledgement of Country

We acknowledge the Wadawurrung People as the Traditional Owners of the Land, Waterways and Skies. We pay our respects to their Elders, past, present and emerging. We acknowledge all Aboriginal and Torres Strait Islander people who are part of our Greater Geelong community today.

We acknowledge the Wadawurrung Traditional Owners for their insights shared during the development of this Plan for Nature. The City of Greater Geelong is committed to supporting the Wadawurrung people care for and heal Country, and to play an increasing role in managing the natural environments of the City.

Executive Summary

The Geelong Plan for Nature 2026–36 (the Plan) sets out how we will identify, protect, restore and enhance our region's biodiversity in the context of rapid population growth and climate change. It responds to the ongoing loss of native plants, animals and ecosystems, and recognises that a healthy natural environment is essential to our region's future health, liveability and resilience.

The Plan is grounded in partnership. It acknowledges the Wadawurrung Traditional Owners as original custodians of Country and recognises the deep connection between nature, culture and wellbeing. It has been shaped through extensive engagement with Wadawurrung, the community, environmental groups, government agencies and City staff.

The Plan is guided by five strategic goals in key areas:

1. Value Wadawurrung Country and culture
2. Prioritise protections
3. Connect and restore
4. Foster stewardship and strong partnerships
5. Build resilience to a changing climate.

A place-based approach underpins the Plan. Six landscapes guide local action across urban, rural, coastal and waterway environments. The plan's targets focus on achieving outcomes across both public and private land, recognising that we need action at all scales. A rolling two-year Action Plan ensures we can adapt, measure and respond as we implement.

By working collaboratively with the community, Traditional Owners, landholders and partner agencies, the Plan provides a clear pathway to halt biodiversity decline, build resilience and ensure nature continues to support people and place, now and into the future.

ACRONYMS

CMA – Catchment Management Authority

City – City of Greater Geelong

CVA – Cultural Value Assessment

DEECA – Department of Energy, Environment and Climate Action

EPBC Act – *Commonwealth Environment Protection and Biodiversity Conservation Act 1999*

FFG Act – *Victorian Flora and Fauna Guarantee Act 1988*

PV – Parks Victoria

TfN – Trust for Nature

WTOAC – Wadawurrung Traditional Owner Aboriginal Corporation.

GLOSSARY

Biodiversity – the variety of all life on earth (animals, plants, fungi, microbes), their interactions and the natural patterns they form. This includes the variety (or diversity) of species, the variety within species (genetic diversity) and the variety of ecosystems.

Biolink/area – geographical area that is a priority for protection and restoration of biodiversity combining corridors, zones and nodes.

Biolink/corridor (C) – geographical area that provides suitable conditions for animal and plant movement through the landscape.

Biolink/habitat node (HN) - geographical area of habitat >10 hectares comprising either remnant vegetation or wetlands

Biolink/restoration node (RN) - geographical area mostly >100 hectares owned by one entity where habitat can be restored

Biolink/priority corridor (PC) – geographical area such as a major river, coastal zone or wetland that is highly significant for animal and plant movement through the landscape.

Biolink Zones (Z) - geographical area > 100 hectares comprising multiple habitats nodes highly significant for biodiversity.

Blue carbon – coastal and marine ecosystems (e.g. mangroves, tidal marshes, seagrasses) that capture and store atmospheric carbon dioxide at rates that can exceed those of terrestrial forests.

CALD Communities – culturally and linguistically diverse communities.

Citizen science – the collection and analysis of data about the natural world by members of the public, often in partnership with researchers or conservation organisations.

Ecosystem – a unique community of living and non-living organisms interacting as a system.

Ecosystem services – the benefits provided to humans through the transformation of natural resources (including land, water, vegetation and atmosphere) into essential goods and services, such as clean air, water and food.

Flora – plant species.

Fauna – animal species.

Green card accreditation – environmental hygiene and biosecurity certification program (e.g. Dieback Green Card) confirming that land managers and field workers can prevent the spread of weeds, diseases and soil-borne pathogens.

Habitat – an area for a species which has the right structure and composition of native vegetation to provide food and shelter and opportunities for breeding.

Habitat connectivity – the connections available in the landscape for flora and fauna to access resources and to retain natural patterns of movement and dispersal.

Invasive species – introduced or non-native species that cause harm to the natural environment by outcompeting, displacing or disrupting native species and ecological processes.

Key wildlife species – ecologically critical or keystone fauna that determine the structure and function of ecosystems and rely on connected habitat corridors for movement.

Nature Kit – a statewide online mapping and data exploration tool for biodiversity data integration and decision support.

No net loss – under Victoria's native vegetation removal regulations, the 'no net loss' objective ensures that biodiversity value is not reduced when native vegetation is approved for removal. This is achieved through an avoid, minimise, and offset hierarchy.

Stewardship – in a catchment context involves both individual and collective efforts in managing natural systems to generate intergenerational benefits for the environment, people and place.

Teal carbon – non-tidal freshwater wetlands (e.g. peatlands, swamps, bogs) that store large amounts of organic carbon in waterlogged soils and vegetation.

Vegetation community migration zones – defined geographical pathways and refugia that enable plant communities to shift distribution in response to climate change, including rising temperatures and sea-level rise.

Introduction

PURPOSE OF THE PLAN

The Geelong Plan for Nature 2026-36 (the Plan) is an investment in protecting, enhancing and restoring biodiversity in the City of Greater Geelong. Now, more than ever, it is critical that we take stock and do what we can to reverse the trend of loss of our critical and unique ecosystems and our native plants and animals. To do this, we will need to work closely with the community, Wadawurrung Traditional Owners and regional stakeholders.

The purpose of this Plan aligns with the Victorian Government's broader commitment to biodiversity. The Government recognises that **biodiversity has an intrinsic right to exist, thrive and flourish regardless of whether it provides tangible benefits to humans, and all Victorians have a duty to protect biodiversity[1].** The City supports this commitment by ensuring that **natural habitat and areas of important biodiversity are identified, protected, connected and restored[2].**

VISION

The Plan has been designed to align with the City's Environmental Strategy Goal of:

Protect, enhance, and restore our region's biodiversity

BRINGING THE VISION TO LIFE

Achieving this vision will require a step-change in how nature is valued, protected, and restored across Geelong. Clear, ambitious targets and strong community support will guide action and inspire collective stewardship of the natural environment.

Restored habitats will support rich native biodiversity and be linked through wildlife corridors, enabling species to move, thrive, and adapt to change. Over time, this recovery will create the conditions needed to reintroduce locally extinct species, such as the Southern Brown Bandicoot, signalling a healthier and more resilient ecosystem. The City will also contribute to national and global goals, including conserving at least 30% of land and wetlands by 2030, while more residents actively participate in conservation and citizen science. Together, these efforts will protect, enhance, and restore Geelong's natural environment for future generations.

Figure 1. Caring for nature[3]

1 Department of Environment, Land, Water and Planning (2017) *Biodiversity 2037*

2 City of Greater Geelong (2025) *Our Council Plan 2025-29*

3 City of Greater Geelong (n.d.). Available at: https://www.geelongcity.vic.gov.au/services/environment-and-sustainability/nature-and-environment/nature-volunteers.

OUR REGION

The City of Greater Geelong (City) is in south-western Victoria, approximately 75km south-west of Melbourne centred around Corio Bay. Covering 1,247 square kilometres, it includes a large part of the Bellarine Peninsula. Our region is made up of the city of Geelong, surrounding suburbs, rural and coastal townships and rural, agricultural and coastal landscapes, including the lower Barwon River. With a population of nearly 290,000[4], Geelong is Victoria's largest regional city and the leading commercial centre for south-western Victoria.

Our region hosts a diverse mix of urban, rural and coastal environments. Many areas, particularly along waterways and the coast, are set aside as public nature reserves[5] that support remnant indigenous vegetation and a diverse range of plants and animals. These include many protected species of international, national or state significance.

Our waterways include the Barwon and Moorabool rivers, lakes, small creeks and estuaries, which provide habitat for a range of freshwater and riparian species. Alongside these waterbodies the region hosts extensive coastline areas, including Corio and Port Phillip bays, that include intertidal mudflats, rocky reefs, sandy beaches and escarpments that provide important habitat for marine and bird life.

Our region hosts 11,639 hectares of wetlands, including significant areas within the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site. Designated under the Ramsar Convention on Wetlands of International Importance, this site includes Swan Bay, the Lake Connewarre complex, Limeburners Bay and the wetlands around Avalon and Point Wilson. Together, these areas provide critical habitat and refuge for many threatened and migratory bird species of both local and international significance.

Wadawurrung values

The Wathaurong (Wadawurrung) people are the Traditional Owners of this region and are today represented by the Wadawurrung Traditional Owners Aboriginal Corporation (WTOAC). For thousands of generations, Wadawurrung people have cared for Country. In Wadawurrung knowledge, the coast, wetlands, grassy and volcanic plains of the Dja (Country) were formed by Bundjil the Eagle, the Ancestor Creator. The name "Geelong" comes from the Wadawurrung word for the region "Djilang" which means "tongue of land"[6].

Wadawurrung culture and livelihoods are deeply connected to the region's biodiversity, with dja (land) and warre (sea) Country seen as one. The inland plains, waterways, coast and warre Country provided abundant food, shelter, medicine and clothing to sustain thousands of generations of Wadawurrung people.

Many animals once common on Wadawurrung Country, like the Fat-tailed Dunnart are now rare. **Kwenda** (Bandicoot), **Yoorn** (Spotted-tail Quoll) and the Eastern Barred Bandicoot are now extinct or rarely seen in this landscape.

Together, these animals, plants and people make Country healthy.

The now threatened Victorian Volcanic Grasslands (most recent estimates suggest between 1 to 5% remain[7],[8],[9]) were once full of food grasses, snakes, lizards, frogs, moths, birds and animals, providing enough food resources for the Wadawurrung people to live there permanently and year-round. The coastal dunes are layered with living places and hearths from the many generations of Wadawurrung ancestors living, harvesting, sharing meals, trading and practising ceremony. The sandy beaches, rock pools, rocky platforms and reefs continue to be places of abundance for harvesting food and resources like crustaceans, shellfish and kelp.

"Most of the large animals, including Go-yin (wallabies), Goim (kangaroos), Walert (possums), ducks and swans were hunted and processed by men using boomerangs and spears. Buniya (eels) were caught in eel traps and water birds were caught in nets that our women wove and made from plant fibres, a practice we continue today. The sea provides bountiful sources of crayfish, abaolone, mussels, oysters, pipis and fish"

~ Wadawurrung Traditional Owners[10]

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4 Australian Bureau of Statistics (2024) *Region Summary: Greater Geelong.* Available at: https://dbr.abs.gov.au/region.html?lyr=lga&rgn=22750

5 City of Greater Geelong (2020) *Environment Strategy 2020-30*

6 City of Greater Geelong (2025) *Reconciliation Action Plan - Wadawurrung Aboriginal history.* Available at: https://www.geelongaustralia.com.au/

7 State Wide Integrated Flora and Fauna Teams (SWIFFT) (n.d.) Available at: https://www.swifft.net.au/cb_pages/team_linear_reserves_project.php

8 Grassy Plains Network (n.d.) Available at: https://grassyplains.net.au/grasslands/

9 Corangamite Catchment Management Authority (n.d.) Available at: https://ccma.vic.gov.au/projects/victorian-volcanic-plains/

10 Wadawurrung Traditional Owners Aboriginal Corporation (WTOAC) (2020) *Paleert Tjaara Dja – Healthy Country Plan 2020-30.*

The region's waterways were rich in eels, fish and waterbirds. The name 'Barwon' comes from parwan, meaning "magpie" or "great wide", and the Wadawurrung refer to yulluk (great river) that runs from the barre (mountains) to the warre (ocean). Coastal waters have long provided abundance with kelp forests supporting diverse marine life and the Wadawurrung harvesting rock lobster and abalone for food, and kelp to use as water carriers. Australia's largest stretch of registered cultural sites in Australia occurs along the coastline of the Wadawurrung *(Paleert Tjaara Dja)*.

Post-colonisation landscape

European settlement dates from 1836, with land largely used for farming, grazing and vineyards. Major development occurred in the post-war years, particularly during the 1960s and 1970s, driven by industrial growth, public housing and migration. Population growth shifted to the Bellarine Peninsula in the 1980s, then in the 1990s to the fringe urban areas of Grovedale, Highton, St Albans Park, Wandana Heights and Waurn Ponds, and outlying areas of Lara, Leopold and Ocean Grove. More recently growth has centred in Armstrong Creek, Mount Duneed and Curlewis as well as to Geelong's north and west.

Close proximity to Melbourne, an affordable and diverse housing market, good transport links and lifestyle opportunities continue to drive strong population growth. An additional 152,000 people are expected to live here by 2036 – an average annual growth rate of 2.5 per cent[11].

Long-term land clearing and urban expansion have left little remnant native vegetation, much of it small and fragmented. Larger remaining areas include the Brisbane Ranges National Park, Wurdi Youang (You Yangs) Regional Park, Barwon River, Lake Connewarre State Game Reserve, Barwon Bluff Marine Sanctuary and Swan Bay.

Figure 2. Grass Trees - Brisbane Ranges[12]

[11] City of Greater Geelong (2026) *Greater Geelong Planning Scheme*. Available at: https://planning-schemes.app.planning.vic.gov.au/Greater%20Geelong/ordinance/02.03.

[12] City of Greater Geelong, Brisbane Ranges

Table 1. City of Greater Geelong at a glance

The region at a glance	
Total Land Area	1,247km^2
Population	289,565[13]
River Basins[14]	Barwon and Moorabool Basins
Major Waterways	Barwon, Moorabool and Little River
Traditional Custodians	Wadawurrung
Wetlands of National Importance	Lake Connewarre State Wildlife Reserve, Avalon, Point Wilson/Limeburners Bay and Swan Bay[15], all part of Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Wetlands Ramsar site
Bioregions	Victorian Volcanic Plains, Otway Plains and Central Uplands bioregions
Land Use	Primary production is the major land use, followed by residential land[16]
Largest Contributors to the Regional Economy	Manufacturing, extractive industries and tourism, especially the Bellarine Peninsula and the coast. Agricultural production is modest, but important and valued in the municipality's north Recent drivers of Geelong's economic growth include health care, education, construction and retail[17]

Figure 3. City of Greater Geelong[18]

13 Australian Bureau of Statistics (2024) *Region Summary: Greater Geelong.* Available at: https://dbr.abs.gov.au/region.html?lyr=lga&rgn=22750

14 Department of Energy, Environment and Climate Action (2025) *Australian Water Resource Council Major River Basins of Victoria* [Dataset]. Available at: https://discover.data.vic.gov.au/dataset/awrc-major-river-basins-of-victoria

15 Australian Government (2019) *Directory of Important Wetlands.* Available at: https://www.environment.gov.au/cgi-bin/wetlands/search.pl?smode=DOIW

16 idcommunity (2021) *City of Greater Geelong: community profile.* Available at: https://profile.id.com.au/geelong/about

17 G21 (2013) *G21 Regional Growth Plan. G21*

18 Victorian Government (n.d.) *Know Your Council*. Available at: https://www.vic.gov.au/know-your-council.

THE BIGGER PICTURE

The Plan has been informed by international, national, state and local conventions, legislation, strategies and policies.

The State of Victoria has over 25 pieces of legislation and over 30 strategies that relate to environmental management. Those relevant to this Plan are listed below in Table 2.

Table 2. Planning Hierarchy

Level	Strategy/Agreement
City of Greater Geelong	• Our 30-year vision • Our Council Plan 2025–29 • Environment Strategy 2020-30.
International conventions, agreements, legislation, and policy	• Kyoto Protocol 1997 • The Ramsar Convention on Wetlands 1971 • United Nations Framework Convention on Climate Change Paris Agreement 2015 • United Nationals Sustainable Development Goals • Bilateral migratory bird agreements[19]
Commonwealth context	• Environment Protection and Biodiversity Conservation Act 1999.
Victorian context	• Environment Protection Act 1970 • Flora and Fauna Guarantee Act 1988 • Planning and Environment Act 1987 • Local Government Act 1989 • Aboriginal Heritage Act 2006 • Catchment and Land Protection Act 1994 • Climate Change Act 2017 • Water Act 1989 • Rivers of the Barwon (Barre Warre Yulluk) Action Plan 2021 • Victoria's Climate Change Strategy 2026-30 • Victorian Waterway Management Strategy 2013 (currently being renewed) • Protecting Victoria's Environment - Biodiversity 2037.
Regional context	• Paleert Tjaara Dja Let's make Country good together: Wadawurrung Country Plan: 2020-30 • Corangamite Regional Catchment Strategy 2021 - 27 • Port Phillip and Western Port Regional Catchment Strategy 2021 -27 • Healthy Waterways Strategy 2018-2028: Port Phillip and Westernport, Victoria • Corangamite Waterway Strategy 2014 - 22 • Kitjarra-dja-bul Bullarto langi-ut masterplan 2023.

[19] *Migratory Bird Agreements: JAMBA (Japan-Australia, 1974), CAMBA (China-Australia, 1986), and ROKAMBA (Republic of Korea-Australia, 2006)*

How we engaged

This Plan has been shaped through extensive engagement with Wadawurrung Traditional Owners, community-based environment and Landcare groups, local naturalists, the wider community, agency stakeholders and City staff.

Find further information about the consultation process and engagement methods used in the updated *Plan for Nature Community Engagement Report 2026*.

Table 3. How we engaged with community and stakeholders in developing the Plan

Wadawurrung Traditional Owners	Community-based environment groups	The wider community	Agency stakeholders	Geelong City Council staff
Regular meetings with the Wadawurrung Traditional Owner Aboriginal Corporation over the period 2021 – 2024. *One walk on Country with Traditional Owners.*	*Presentations to the Nature Stewards and Community Nature Group Celebration during the engagement campaign during Oct 2023 – Jan 2024.* *Community group mail out to key volunteer environment groups during the 2022/23 engagement campaign.* *Two meetings with a community technical advisory group, which included representatives from community-based environment groups in the City and local conservationists.*	*A wide community engagement campaign was held during Oct 2022 – Jan 2023 which included:* • *a tailored project website, which hosted three survey formats and invited photo submissions* • *information stalls at regional events* • *promotional material distributed to community centres* • *open house sessions at the City's office* • *social media posts* • *presentations to the Youth Council.*	*Two meetings with an agency stakeholder technical advisory group.* *Input via the 2022/23 engagement campaign.* *Two biolink workshops in March 2023 and January 2024.*	*Two meetings with a Council staff technical advisory group.* *Meetings with the City's Sustainable Advisory Committee and Councillors from the Environment portfolio.* *One staff workshop to identify key actions, held in June 2024.* *Councillor workshop in November 2025.*

WHAT WE HEARD

What people value about nature in the City

Survey respondents identified the following values:

- **Native flora and fauna**, especially the contribution they make to people's wellbeing in urban areas
- Opportunities for **recreation** provided by natural reserves
- Enjoyment of waterways and beaches
- **Remnant intact habitat** such as large old trees
- Benefits nature provides to psychological, physical and emotional wellbeing
- **Accessibility and diversity** of natural areas around the City.

The natural places people enjoy most

- **Barwon and Moorabool River** corridors are one of the community's favourite natural places in the City.
- **You Yangs Regional Park** and the **coastal reserves** are also enjoyed by many people.
- Some people also identified natural parklands, wetlands, grasslands of the Victorian Volcanic Plains and woodland reserves as favourite places by some people.

- Many respondents also nominated natural areas not listed in the survey, most commonly the Bellarine Peninsula, Serendip Sanctuary, Edwards Point, Ocean Grove Nature Reserve, St Leonards and Breamlea – Thompson's Creek estuary and wetlands.

Many of the sites valued by people are not managed directly by the City. Some are managed by Parks Victoria, such as the You Yangs Regional Park and Serendip Sanctuary. Others occur across public and private land tenures, like the grasslands of the Victorian Volcanic Plains. Breamlea estuary and wetlands exist on the border with Surf Coast Shire. We need partnerships and cooperation between the City, other public land managers and private landholders.

Perceived threats to nature

- **Extensive habitat loss or fragmentation**, **subdivision and development pressures**, and **barriers to wildlife movement** were identified as the most urgent threats. It is likely that these threats are perceived to be interlinked, as many respondents expressed concern about the effect of urban development on remnant habitat and wildlife movement.
- Climate change impacts, pest animals (rabbits, foxes, feral cats), loss of hollow-bearing trees, weed invasion, herbicides, pesticides and other air pollutants, and urban stormwater runoff were all listed as other significant threats to nature in the City.
- Additional threats include littering, rubbish dumping and plastic pollution in waterways, disturbance by domestic dogs and cats, duck shooting and the associated pollution of wetlands with shooting debris, and the invasive Indian myna.

Opportunities for enhancement

Survey respondents identified the following opportunities to enhance nature, in order of perceived importance:

- Establish wildlife corridors across the landscape linking existing habitat
- Greater use of land use planning controls and other regulatory tools to protect existing natural areas and biodiversity
- Support for community groups and landholders to undertake nature restoration works
- More opportunities for the community to become engaged in nature projects
- Managing people's impact to parks and reserves where there are high natural values
- Collaborative projects between agencies and the community for on ground nature works
- Long term stewardship and protection programs aimed at land conservation, such as covenants and acquisition
- Connection to Country of the Wadawurrung people.

There was an overwhelming common concern about the **impact of increasing population growth and land use change on nature**, particularly remnant habitat and wildlife movement. Many people want to see more restrictions placed on housing development to preserve and restore native habitat within urban areas, as well as establishing corridors to support wildlife movement across an otherwise fragmented landscape.

A public exhibition phase was also undertaken for the Plan via the City's Have Your Say platform from 1 April to 30 April 2026, providing the community and stakeholders with a further opportunity to review and comment on the proposed directions and actions.

Feedback received during this exhibition period has been carefully considered and incorporated where appropriate, helping to refine, strengthen and finalise the Plan.

Figure 4. **From top left:** Community **drop-in session at the Geelong Waterfront Market, City workshop, Plan for Nature Postcards and Bellarine Biolinks Workshop**

Drivers of change

THE CITY IS UNDERGOING SUBSTANTIAL POPULATION GROWTH. TOGETHER WITH BENDIGO AND BALLARAT, GREATER GEELONG IS EXPECTED TO ABSORB HALF OF ALL GROWTH OUTSIDE METROPOLITAN MELBOURNE BY 2036.[20]

At the same time, climate change is driving a drier, warmer future. Together, these pressures will intensify impacts on our natural environment[21].

We need a more coordinated response to protecting and managing nature to ensure the City can continue to support and enhance the liveability of our region.

CLIMATE CHANGE

The Barwon region has already become drier and warmer, a trend expected to continue[22]. Changes include rising temperatures, more variable rainfall, sea level rise and stronger winds[23]. By the 2050s, some predictions suggest Geelong's climate will resemble Shepparton's climate today[24]. Extreme weather events such as droughts, bushfires, heavy rain and heatwaves are also expected to become more frequent (see Figure 5).

TEMPERATURE	• Maximum and minimum daily temperatures will continue to increase • By the 2030s, increases in daily maximum temperature of 0.8 to 1.5°C are expected
RAINFALL	• Rainfall will be variable but continue to decline in winter, spring and autumn • Extreme rainfall events are expected to become more intense and variable
SEA LEVEL	• Sea levels are expected to continue rising by 4mm per year
FIRE DANGER	• High fire danger days are projected to increase to 9 days per year

Figure 5. Climate projections for the Barwon Region[25]

Biodiversity in Victoria, including in the City, has declined significantly since European settlement due to land clearing, fire, pest plants and animals, land development, altered hydrological regimes and water pollution. Climate change is likely to amplify these threatening processes, reducing the ability of native plants and animals to adapt and increasing the risk of loss or extinction of local populations and species.

Below are some of the changes that may shape the City's natural environment.

Native vegetation and waterways

The Barwon River, Moorabool River and key urban waterways including Hovells Creek are the City's primary waterways and underpin regional hydrology, providing critical habitat, supporting remnant riparian vegetation and sustaining downstream wetlands and estuarine systems, including the Barwon Estuary and the Ramsar-listed wetlands of the lower Barwon River system, including the Lake Connewarre wetland complex. These waterways are part of a connected, living system extending across the Barwon catchment, linking rivers, creeks, wetlands and estuarine environments from the uplands to the coast.

Reduced inflows and altered flow regimes in the Barwon and Moorabool Rivers[26] driven by climate variability and water use across the catchment are already affecting water availability, water quality and ecological condition, with flow variability influencing sediment transport, salinity and habitat suitability for aquatic species.

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20 Victoria in Future (2019)
21 City of Greater Geelong (2021) *Climate Change Response Plan*
22 Department of Environment, Land, Water and Planning (2015) *Climate-ready Victoria: Barwon South West*
23 City of Greater Geelong (2021) *Climate Change Response Plan*
24 Clarke et al. (2019) *Barwon Climate Projections 2019*
25 Clarke et al. (2019) *Barwon Climate Projections 2019.*
26 Department of Environment, Land, Water and Planning (2021) *Rivers of the Barwon (Barre Warre Yulluk) Action Plan*

Growing population and urban development within the catchment are adding to these pressures[27], particularly through increased stormwater runoff and demand for water resources.

Extended dry periods and drought with reduced rainfall and higher temperatures will impact availability of soil moisture and water for surface and groundwater systems. This will change the composition of vegetation communities, with some species replaced by those better suited to warmer, drier conditions. Grassland species may also change in response to elevated carbon dioxide and shifting soil moisture levels.

Old remnant trees are particularly vulnerable to altered wetting and drying cycles, extreme heat and bushfire. These trees' hollows, expansive canopies and complex branch structures provide irreplaceable habitat for a range of native mammals, birds, insects and reptiles. They also play a vital role in nutrient cycling, carbon sequestration and water regulation. The death of these trees reduces habitat and releases stored carbon back into the atmosphere.

Bushfires are expected to become more frequent and intense, favouring fast-growing, fire-tolerant species and increasing soil erosion, nutrient loss and sedimentation of waterways, impacting wildlife and increasing sediment and nutrient loads entering waterways such as the Barwon and Moorabool Rivers.

Along the coast, sea level rise and stronger storms threaten vulnerable Bellarine and Corio Bay ecosystems. Over time, the natural inward migration of coastal vegetation communities, such as saltmarsh and mangrove, forced to migrate inland, may be lost as they hit sea walls, road infrastructure and other impediments.

More frequent and intense rainfall is increasing stormwater run-off that could affect wetlands, streams and estuaries and downstream marine environments. We already have examples where the combination of increased urban development (and impervious surfaces) coupled with rainfall changes is impacting the natural hydrology of the Sparrovale Wetlands Reserve - *Ngubitj yoorree* and the coastal wetlands between Ocean Grove and Point Lonsdale. In highly urbanised catchments such as Hovells Creek, increased impervious surfaces accelerate stormwater flows, contributing to channel erosion, reduced water quality and impacts on downstream ecosystems including Corio Bay.

These waterways also function as key ecological corridors[28], supporting species movement across the landscape. Maintaining riparian condition and connectivity along the Barwon and Moorabool Rivers and Hovells Creek is critical to sustaining biodiversity in an increasingly fragmented and urbanised environment.

Native fauna

Our most threatened ecological communities like Coastal Saltmarsh and threatened species like Orange-bellied Parrot and Hooded Plover are most vulnerable to climate change.

Changes in temperature, rainfall and sea level are altering habitats, reducing food and shelter and shifting where species can survive. More frequent and intense bushfires are shrinking unburnt habitat, while rising seas are likely to reduce coastal vegetation and impact the wildlife populations that depend on these environments.

Higher temperatures change the timing of life cycle events and distribution for animals and plants. Those with highly specific habitat requirements, limited dispersal ability or fragmented habitats may be most affected, leading to more local extinctions.

Drying wetlands and waterways will affect aquatic species by reducing water availability and quality, while increasing water temperatures, reducing dissolved oxygen levels and increasing the risk of toxic algal blooms.

Climate change is likely to favour more-tolerant, faster-breeding invasive species, adding more pressure to native species through competition for dwindling food sources, increased predation and habitat loss.

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27 Department of Environment, Land, Water and Planning (2021) *Rivers of the Barwon (Barre Warre Yulluk) Action Plan*

28 Department of Environment, Land, Water and Planning (2021) *Rivers of the Barwon (Barre Warre Yulluk) Action Plan.*

Figure 6. The endangered Hooded Plover[29]

The Hooded Plover (which is nationally listed as vulnerable) will experience the compounding impacts of climate change. Coastal erosion and sea level rise will threaten their habitat, while growing beach use (including dogs) will further disturb. Habitat loss through the incursion of sea wheat grass and ongoing predation by foxes and native birds add further pressure, reducing the Hooded Plover's ability to survive.

Cultural impact

Climate change has significant and distinct impacts for Indigenous people, affecting culture, knowledge and spiritual connection to Country. Declining biodiversity, changing ecosystems and increasing species loss reduce access to resources central to cultural practices. Wadawurrung people are already seeing the loss of kelp forests, dramatic changes in sea life, rising sea levels and risk to cultural sites[30].

Climate change is also disrupting Indigenous seasons, with environmental triggers occurring at different times. The long absence of cultural burning for centuries has altered ecosystems across Country and limited opportunities to heal and regenerate Country. Wadawurrung knowledge recognises fire as intrinsic for managing Dja (Country), particularly in the context of harsher weather patterns and longer fire seasons[31].

Indigenous knowledge, shaped by thousands of generations living with Country, is vital for guiding climate adaptation and supporting healthy landscapes into the future.

POPULATION GROWTH

The City's recent strong population growth is likely to continue. The population is expected to grow to 441,984 by 2046[32], an increase of more than 44% on the current estimated resident population. The main factors contributing to this phenomenon are:

- Geelong feeds off broader population increases in Australia, Victoria and Melbourne.
- According to 2021 census data[33], Geelong gains population via migration from overseas, interstate and within Victoria particularly south-west Victoria, which is likely to continue.
- House prices are lower than Melbourne and there is less traffic congestion. New transport upgrades provide good access to Melbourne's job market and services and local employment opportunities are growing.

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29 City of Greater Geelong (n.d.) Hooded Plover image. Available at: https://www.geelongaustralia.com.au/hoodedplover/article/item/8cf5b098da0360a.aspx

30 Wadawurrung Traditional Owners Aboriginal Corporation (2020) *Paleert Tjaara Dja – Wadawurrung Country Plan*

31 Wadawurrung Traditional Owners Aboriginal Corporation (2020) *Paleert Tjaara Dja – Wadawurrung Country Plan*

32 City of Greater Geelong population forecast (2026) Available at: https://forecast.id.com.au/geelong

33 Australian Bureau of Statistics (2021) *Census of Population and Housing, Usual Residence Data*.

This population growth has led to rapid urban expansion, particularly in Armstrong Creek and on the Bellarine at Leopold, Ocean Grove and Drysdale/Clifton Springs. Future growth will continue to be focus on Armstrong Creek and the Northern and Western Geelong Growth Areas, the largest regional urban expansion in Victoria, comprising over 5,300ha[34]. Growth on the Bellarine may be more limited due to support for maintaining its character through planning controls guiding land use, management and development for the next 50 years.

Strategic planning frameworks and initiatives[35], including the Northern and Western Geelong Growth Areas, the Geelong Growth Areas Strategic Assessment, the Melbourne Strategic Assessment and the Greater Avalon Employment Precinct, are guiding large-scale land use change across the region to accommodate population growth, housing demand and employment opportunities. These areas support regionally significant biodiversity values, including remnant native grasslands to the north of Geelong, riparian and floodplain habitats associated with the Barwon and Moorabool River systems, and coastal and wetland environments linked to the lower Barwon River and Bellarine Peninsula. These changes have the potential to affect the extent, condition and connectivity of these biodiversity values across the landscape, particularly in areas undergoing transition from rural or natural land uses to urban or industrial development. Planning for these precincts incorporates measures to avoid, minimise and offset impacts on these values, including consideration of high-value vegetation, habitat connectivity and application of native vegetation removal and offset requirements.

Without adequate planning, the significant population growth and urban expansion will continue to put pressure on biodiversity and the remaining natural areas in the City[36]. Only a careful, collaborative response can prevent further loss and fragmentation of remnant vegetation and protect and restore ecological communities that are already threatened or endangered, such as the grassland communities to the City's north.

LAND USE CHANGE

Since European settlement, widespread vegetation clearing for agriculture, horticulture, industry and townships has significantly reduced native vegetation across the City[37]. Most remaining native vegetation is now found in public reserves and parks, protecting important habitat remnants that have been largely cleared elsewhere. Around 12,094ha (approximately 9.7%) of City land is permanently protected, including Parks Victoria managed land, City nature reserves and private land protected under Trust for Nature covenants. Outside these areas, native vegetation is mostly threatened and largely fragmented, occurring in small patches along roadsides, waterways and the coast, or scattered across private property.

The consequences of native vegetation loss are well-known and include reduced biodiversity, increased salinity, soil erosion, and deteriorating water quality in our rivers, creeks and wetlands[38].

Without appropriate planning and management, several land use changes may continue to contribute to the loss, fragmentation and degradation of native vegetation in the City. These are:

- Widespread urban development and expansion into previously agricultural or natural areas, leading to potential removal or fragmentation of remaining patches of vegetation. This includes removal or fragmentation of old habitat trees, woodland habitats and grasslands
- Increased built infrastructure, including utilities and roads, which has expanded to service a fast- growing population
- Subdivision of larger farms to meet increased demand for lifestyle properties – a trend particularly evident across the Bellarine. Subdivision can lead to further removal of native vegetation to make way for housing and services and can increase the threat to wildlife from domestic pets and introduction of garden weeds.
- Offsets required under Victoria's *Planning and Environment Act 1987* and the state's Native Vegetation Removal Guidelines to mitigate the net loss of biodiversity from a planning development are commonly purchased outside the City. This leads to further biodiversity loss within the City, contributing to the ongoing fragmentation of threatened ecosystems.

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34 Department of Climate Change, Energy, the Environment and Water (DCCEEW)(2025) Geelong Growth Areas Strategic Assessment. Available at: https://www.dcceew.gov.au/environment/epbc/approvals/strategic-assessments/geelong-growth-areas

35 DCCEEW (2025) Geelong Growth Areas Strategic Assessment. Available at: https://www.dcceew.gov.au/environment/epbc/approvals/strategic-assessments/geelong-growth-areas

36 City of Greater Geelong (2021) *Climate Change Response Plan*

37 Corangamite Catchment Management Authority (CCMA) (2024) *Corangamite Regional Catchment Strategy*

38 CCMA (2024) Corangamite Regional Catchment Strategy.

In recent years, the City's nature reserves nearly doubled from around 700ha to 1,358ha, largely through land transferred as development offsets. While the total area has grown, many new reserves are small and fragmented, raising concerns about their long-term ecological quality and resilience.

PEST PLANTS AND ANIMALS

Pest plants and animals are a major problem in the City. They compete with native species for resources, prey on native fauna, damage habitats and disrupt ecosystems. Established pest animals in the region include rabbits, foxes, feral cats, deer, and invasive bird species such as the Indian myna. Rabbits and foxes and some deer species (e.g. sambar, fallow, red deer) are declared established pest animals under the Catchment and Land Protection Act 1994, while feral cats and Indian mynas are not formally declared but are widely recognised significant threats to biodiversity. Indian mynas are highly adaptable and aggressive birds that compete with native wildlife for nesting sites and can displace hollow-dependent species, reducing local biodiversity.

Pest plants also threaten biodiversity and agriculture by invading native vegetation, providing shelter for pest animals, increasing fire fuel loads and, in some cases, reducing land values.

Strategic Direction

The Plan forms a key part of the City's broader environmental program. It provides detailed direction on how we can achieve our goal of protecting, enhancing, and restoring biodiversity in line with the Environment Strategy 2020-30 and, more broadly, our community vision. Achieving these goals requires sustained investment in biodiversity. Without it, we cannot achieve this goal or contribute to the community aspiration of**:**

By 2047, Greater Geelong will be internationally recognised as a clever and creative city-region that is forward looking, enterprising and adaptive, and cares for its people and environment.

Specifically, the *Environment Strategy 2020-30* and *Geelong Plan for Nature 2026-36* will focus on delivering the following components of the community vision:

- Sustainable development that supports population growth and protects the natural environment
- Development and implementation of sustainable solutions.

The Plan specifies five goals, each with defined outcomes, targets and actions, which align with and support the guiding principles of Goal 4 in the Environment Strategy.

Figure 7 outlines the strategic foundation of the Plan.

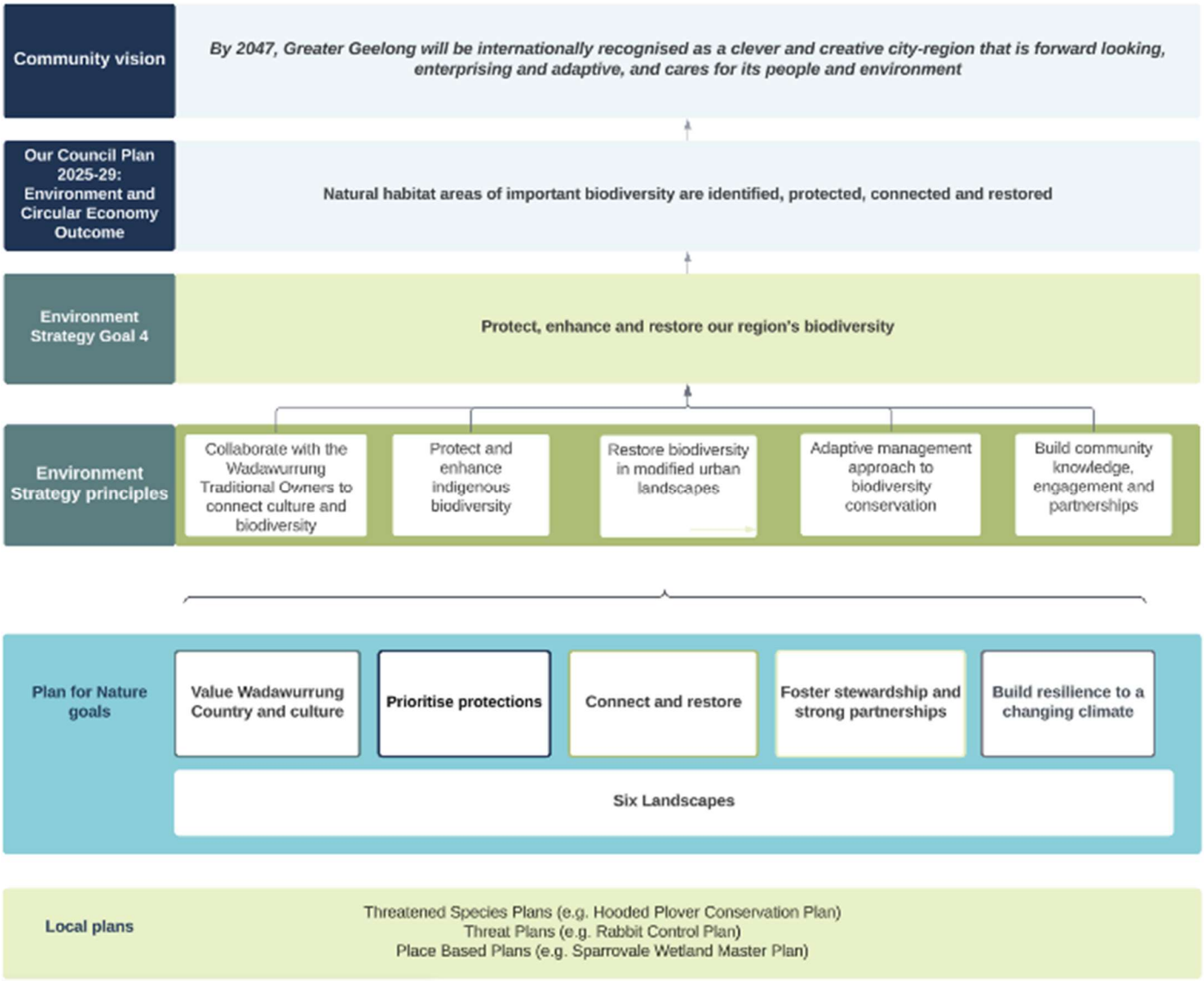

Figure 7. Strategic foundation of the Plan

STRUCTURE OF THE PLAN

The Plan sets long-term (10 year) strategic objectives and targets for each of the five goals. These higher-level objectives will be implemented over the life of the Plan. Underpinning this is a shorter-term Action Plan, comprising a series of actions that will be implemented over two years. Many of the short-term actions are place-based and will apply to one of six landscapes (refer next section), while some actions will apply to the whole of the City. The Action Plan will be reviewed and updated every two years on a rolling basis.

State of Nature reports have been prepared for each of the six landscapes and describe the current state of biodiversity, threats and opportunities. Key species have also been identified for each landscape and are documented in this Plan.

Figure 8 provides an overview of the elements of the Plan, which are described in detail in the following sections.

Figure 8. The elements of the Plan

Landscapes: Values, Threats and Opportunities

OVERVIEW

The Plan has also adopted six landscapes. These areas align with the landscapes (or local areas) described by the Corangamite Catchment Management Authority (CMA) and Melbourne Water in the Corangamite and the Port Phillip and Western Port Regional Catchment Strategies (refer to Figure 9).

These are areas with common features based on demographics, land use, vegetation, geology, geomorphology, soil, topography, hydrology, climate, bioregions and connectivity[39]. The six landscapes described in this Plan allow for more detailed, place-based planning and more locally focused management of biodiversity values.

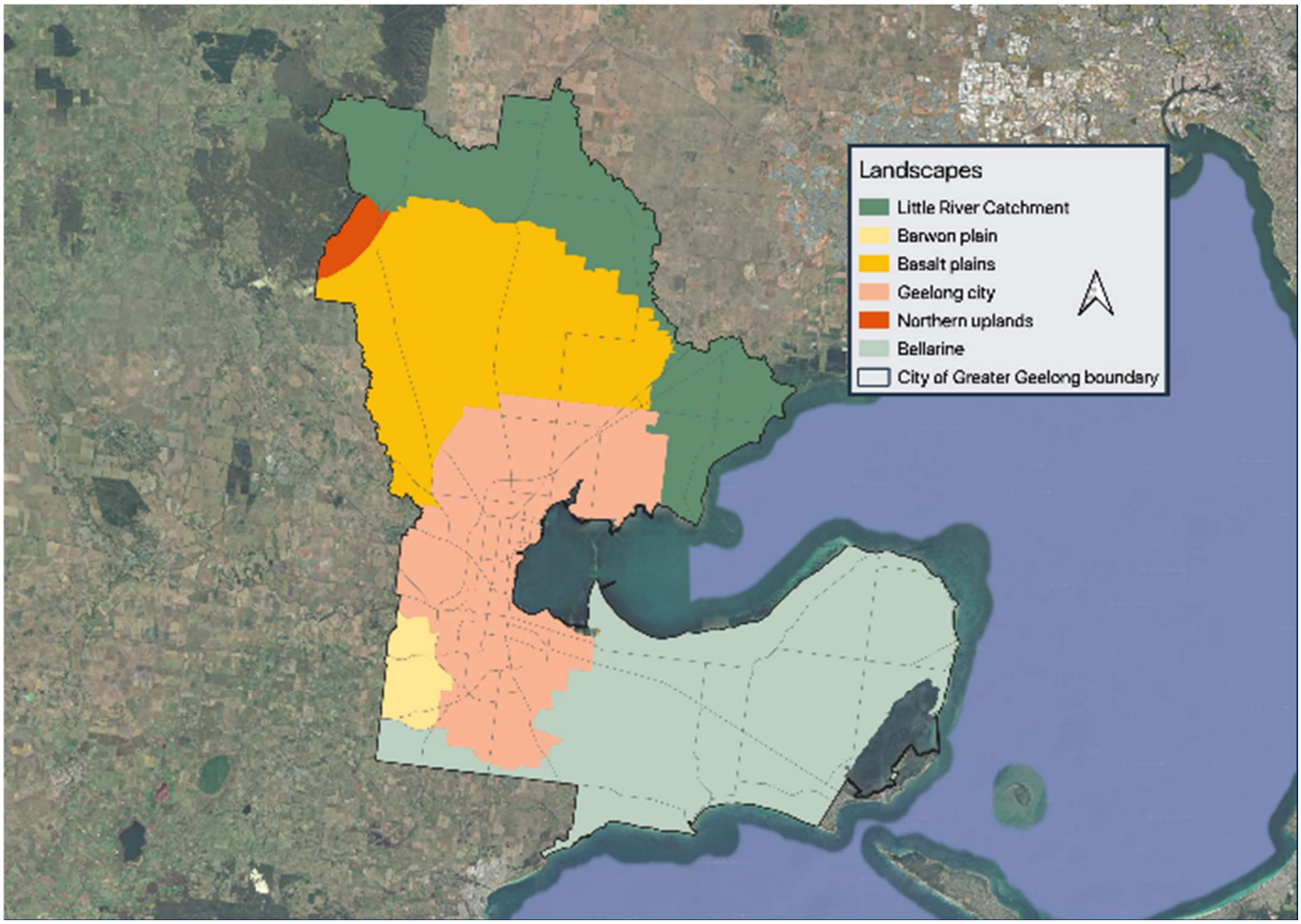

Figure 9. Landscapes or local areas that occur in the City of Greater Geelong (as based on the Corangamite and Port Phillip and Western Port Regional Catchment Strategies)

This section describes each of these landscapes, its current condition, as well as the key threats and opportunities for its biodiversity. Localised, short-term (two-year) actions have been identified for each landscape (as well as some actions that apply across the whole City), which build on longer-term strategic objectives. The first section provides a snapshot for the entire municipality.

More details about the state of nature have been developed for each landscape as part of the development of this Plan. This information provides a more in-depth account of the state of biodiversity, trends, threats and opportunities pertaining to each landscape. This is information is available by contacting the City.

[39] *Corangamite CMA (2021) Summary of Local Areas. URL: https://corangamite.rcs.vic.gov.au/local-areas/summary-of- local-areas/ (Accessed 26 August 2024)*

Across Djilang

The Wadawurrung connection to Geelong, known as “Djilang”, is a powerful lens for understanding the region’s landscapes and biodiversity. Djilang, the “place of the sea bird over the white cliffs”, spans warre (sea), coastal wetlands, estuaries, saltmarshes, inland waterways including the Parwan (Barwon River), grassy plains, hills and woodlands. Once, the rich habitats were connected and uninterrupted, reflecting Wadawurrung belief that warre and dja (land) are inseparable.

The diverse landscape supports a rich array of flora and fauna, including migratory and resident birds, native mammals such as the Go-yin (wallabies) and Walert (possums), fish, amphibians and reptiles.

While Djilang is still a place of significant biodiversity, the landscape has been profoundly changed by urban growth, agriculture, industry, introduced species and climate change. It’s now fragmented, with remaining patches of remnant vegetation scattered across the City. Though limited, what remains is critically important, supporting species that were once widespread and are now threatened.

We must act now and work together with Wadawurrung and our growing community to protect and restore biodiversity across Djilang.

CURRENT CONDITION

- Highly fragmented landscape, with patches of remnant vegetation remaining that are mostly threatened, with very significant biodiversity values
- Stands of scattered and isolated old trees exist across the landscape, particularly in the north
- Areas of very high biodiversity value exist across the Ramsar wetlands, including expansive and diverse areas of saltmarsh vegetation.
- Table 4 provides a snapshot of some nature indicators for the municipality.

OPPORTUNITIES

- Creating landscape scale biolinks to increase habitat connectivity
- Supporting Wadawurrung Traditional Owners to have a more prominent role in Caring for Country
- Increasing the diversity in community participation and engagement in biodiversity conservation across the City
- Stronger planning protections for biodiversity across the City
- Partnerships with Corangamite CMA, Melbourne Water, Parks Victoria and other key stakeholders.
- Monitoring and promoting the importance of invertebrates in restoring and sustaining healthy ecosystems.

THREATS

The threatening processes impacting biodiversity across the City are discussed in detail in this Plan (refer to the Drivers of Change section). The main threats are:

- Climate change
- Population growth
- Land use change
- Pest plants and animals.

KEY SPECIES AND HABITAT

As part of promoting species protection across the Greater Geelong region, the City has identified six key species and their associated habitats to guide monitoring efforts and strengthen the community’s connection to nature. These species and habitats are not exhaustive or definitive but serve as examples to highlight the City’s broader conservation values and priorities.

Invertebrates (including insects and spiders and aquatic groups such as crustaceans) are a key focus for the Plan due to their critical role in sustaining biodiversity and ecosystem health. For example, insects are primary pollinators, supporting the reproduction of many native plants and underpinning broader habitat resilience. Invertebrates also drive nutrient cycling by breaking down organic matter and enriching soils, which is essential for ecosystem productivity and restoration. As a foundational part of food webs, they support birds, mammals and other wildlife, while also acting as indicators of environmental health. Protecting invertebrate diversity is therefore fundamental to achieving long-term biodiversity outcomes.

Barwon Plain

The Wadawurrung know the Barrabool Hills as barro aabil, meaning “place of rounded hills”. Prior to European colonisation, the landscape was mostly open woodlands of drooping sheoak, acacias and banksias, with a diverse ground layer of herbs and grasses. Pure grasslands covered the elevated areas and stands of river red gums and swamp gums lined the Barwon River.

Farmers cleared most of the area, harvesting sheoak for firewood and replacing native perennial grasses with exotic pastures and crops. Key natural values of the Barwon Plain landscape are the Barrabool Hills, the Barwon River and Waurn Ponds Creek.

CURRENT CONDITION

- Very few examples of intact remnant vegetation remain
- No City managed nature reserves (other than roadsides) or any other public land for nature conservation
- The best remaining remnant vegetation exists along the Barwon River corridor.

Map 7 shows the mapped extent of existing remnant vegetation, its biodiversity conservation significance and old trees[40]

Map 13 shows protection measures

Table 4 provides a snapshot of some nature indicators for the Barwon Plains.

KEY SPECIES AND HABITAT

Bundjil (Wedge-tailed Eagle *Aquila audax*)

Habitat: Open country with large old trees

Australia’s largest bird of prey, the Wedge-tailed eagle has a wingspan up to 2.3 m and a distinctive wedge-shaped tail. On the Barwon Plains, they favour the open country and large old trees for locating prey and building their nests. They can be seen perched on trees or soaring high overhead[41].

According to the Wadawurrung, Bundjil, often depicted as a Wedge-tailed Eagle, is an ancestral spirit who created the land, water, sky and people of the wider landscape.

Protecting old habitat trees and reinstating Bundjil habitat in this landscape is very important.

THREATS

- Climate change
- Pest plants and animals
- Population growth and urban development in surrounding areas
- Loss of old ‘habitat’ trees.

OPPORTUNITIES

- Waterways (Barwon River and Waurn Ponds Creek) as biolink corridors
- Private land restoration
- Partnerships with Deakin University to restore Waurn Ponds Creek.

Figure 10. Map of the Barwon Plain landscape

Figure 11. Bundjil (Wedge-tailed Eagle)[1]

[40] *Native Vegetation – City of Greater Geelong Biodiversity Mapping 2013 - 2025*

[41] *Birdlife Australia (2024) Wedge-tailed Eagle. URL: https://birdlife.org.au/bird-profiles/wedge-tailed-eagle/ (Accessed 25 August 2024).*

Bellarine

The Bellarine's name comes from the Wadawurrung word Bellawiyn, meaning "resting by the fire". Before European settlement, the Bellarine Peninsula was dominated by extensive open eucalypt woodlands. Very little remnant vegetation remains today, the largest being the Lake Connewarre Complex including extensive saltmarsh and mangroves. Lake Connewarre and Swan Bay form part of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site, including important saltmarsh habitat, seagrass habitat, wetlands and an estuarine environment where Barwon River meets the sea. The area also supports marine parks and habitat for threatened species such as Orange Bellied Parrot, Swift Parrot and Hooded Plover.

The Bellarine landscape has evolved over thousands of years and supports high biodiversity. For the Wadawurrung people, the connected chain of ponds from the Barwon River to Reedy Lake, Hospital Swamps, Lake Connewarre and Estuary Bay are linked through Connewarre (Black Swan) Dreaming.

CURRENT CONDITION

- Highly fragmented landscape, with patches of remnant vegetation along the thin shoreline strip and within wetlands
- Significant roadside remnants remain, plus larger protected areas such as the Ocean Grove Nature Reserve, the Point Richards Reserve, and the Lake Connewarre wetlands
- Remaining patches of remnant vegetation with significant biodiversity values are mostly threatened
- Grassy woodlands have been significantly reduced or degraded
- Large trees have been extensively cleared
- Heathy woodlands (with grasstree understory), once wide-spread on the Bellarine, have been reduced to small remnant pockets
- Highly engaged community – 38 caring for nature and citizen science volunteer groups most supported by Bellarine Catchment Network
- Small coastal tributaries on the bayside are largely degraded.

Map 8 shows the mapped environmental values[42].

Map 14 shows protection measures.

Table 4 provides a snapshot of some nature indicators for the Bellarine.

THREATS

- Climate change
- Significant and increasing threat to coastal ecosystems from sea level rise, storm surges and coastal erosion
- Population growth and urban development
- Continued fragmentation and loss of habitat.
- Natural regeneration of habitat is threatened from grazing by rabbits, some wildlife and domestic animals
- Loss of old 'habitat' trees
- Pest plants and animals
- Untreated stormwater as threat to wetlands.

Figure 12. Map of the Bellarine landscape

[42] *Native Vegetation – City of Greater Geelong Biodiversity Mapping 2013 - 2025*

OPPORTUNITIES

- Blue carbon opportunities, for example, south-east Bellarine, at the Point
- Protection of old habitat trees and enhancement of wetlands, woodlands, grasslands
- Restoring and creating habitat nodes at future sites such as the Drysdale Resource Recovery Centre
- Opportunities to encourage multiple “hobby farmers” on 5-acre blocks to plant indigenous vegetation and create restoration nodes
- Enhancement of the habitat in the City managed Buckley Park Foreshore Reserve zone
- Increased habitat connectivity, especially along coastal creeks of the Bellarine, the Bellarine Rail Trail, the Ocean Grove Nature Reserve zone and the zone around the old Bellarine Basin reserve (Murrk Ngubitj Yarram Yaluk) through collaboration with public/private landholders
- Coastal erosion adaptation and roadside protection
- Enhancement of the Bellarine Rail Trail vegetation quality to create a better functioning biolinks corridor
- Coordinated pest plant and animal control
- improve management of stormwater into wetlands to protect values
- Working with Wadawurrung Traditional Owners at priority sites
- Strengthened and diversified volunteering opportunities
- Reviewed and amended planning controls.

KEY SPECIES AND HABITAT

Eastern Yellow Robin (*Eopsaltria australis*)

Habitat: Remnant grassy woodlands and heathy woodlands with shrubs and understory

The Eastern Yellow Robin is a little woodland bird of eastern Australia - one of the pouncing robins. They are found in a range of habitats including remnant woodlands with low to mid level shrubs across the Bellarine Peninsula. Both the female and male are similar in appearance with a grey head and grey/olive back with a bright yellow rump. Its’ song is one of first to be heard in the morning chorus. They can be seen on the side of a tree trunk or low perch. They forage mostly on the ground or pounce from a low perch eating insects, spiders and other invertebrates. Woodland birds are declining due to loss, fragmentation, and simplification of habitat.

Figure 13. Eastern Yellow Robin (photo by Rob Solic)

Basalt Plains

The Basalt Plains landscape area is part of a larger landscape system extending west from Greater Geelong. It's home to known rare and threatened species and significant and endangered vegetation communities like native grasslands. Threatened species include the Grassland Earless Dragon, Growling Grass Frog, Striped Legless Lizard, Golden Sun Moth and Spiny Rice-flower.

Other significant natural features include highly biodiverse Wurdi Youang (You Yangs or "big hill") and part of Anakie Youang (Mt Anakie or "little hill"). Hovells Creek is a key waterway connecting the Basalt Plains to Limeburners and Corio Bays.

Figure 14. Map of the Basalt Plains landscape

CURRENT CONDITION

- Native grasslands lack diversity and are fragmented
- Extensive stands of old trees remain on Hovells and Sutherlands creeks and in the higher country
- Some of the best examples of remnant grasslands occur on City managed roadsides, for example, the Old Melbourne and Peak School Roads.
- Map 9 shows the mapped extent of existing remnant vegetation, its biodiversity conservation significance and old trees43.
- Map 15 shows protection measures.
- Table 4 provides a snapshot of some nature indicators for the Basalt Plains.

THREATS

- Continued loss, degradation and fragmentation of grassland habitat on private land
- Climate change
- Pest plants and animals
- Loss of old 'habitat' trees.

OPPORTUNITIES

- Private land conservation focused on grasslands, grassy woodlands and old habitat trees
- Protection and enhancement of biolink corridors along Hovells and Sutherlands creeks
- Supporting Wadawurrung Traditional Owners to undertake cultural burning
- Protection of high value roadsides
- Partnerships with Grassy Plains Network, Victorian National Parks Association (VNPA) or North West Alliance.

KEY SPECIES AND HABITAT

Pobblebonk Frog or Eastern Banjo Frog (*Limnodynastes dumerilii*)

Habitat: Season freshwater wetlands, dams and waterways

The common, burrowing frog is found in waterways and farm dams across the Basalt Plains. It is easily identified by its distinctive loud "bond" or "plonk" call likened to a banjo string being plucked, making it great for surveys, even if it can't be seen. Adults grow up to 7.5 cm long, with a brown to green colouring and distinctive warty back, orange or yellow mottling on the sides, and a pale back yellow stripe from under eye to shoulder[44].

Restoring habitat along Hovells and Sutherlands creeks will help support local populations.

Figure 15. Pobblebonk Frog

[43] *Native Vegetation – City of Greater Geelong Biodiversity Mapping 2013 - 2025*

[44] *Australian Museum (2021) URL: https://australian.museum/learn/animals/frogs/eastern-pobblebonk-frog/ (Accessed 18 Dec 2025)*

Geelong City Landscape

Geelong's name comes from the Wadawurrung word Djilang, meaning "tongue of land". Spanning more than 28,000 hectares, the city landscape encompasses the urban centres of both Geelong and Lara. Despite its population density, important natural values remain. These include habitat within public reserves, coastal wetlands and saltmarshes, waterways such as the Barwon River, Waurn Ponds Creek and local creeks, as well as areas of remnant native grasslands in open spaces and along roadsides. The nationally significant Grey-headed flying Fox camp at Eastern Park is another key natural asset in the Geelong City landscape.

The Barwon River (Parwan) flows through the city centre and is central to Wadawurrung Country. Wadawurrung people consider the Barwon and its connected waterways and wetlands as a living entity. Stands of river red gum, woolly tea tree and silver wattle line the riverbanks, and over 100 bird species occur here, along with the water rat (Rakali), platypus and swamp wallaby.

Warre (sea) country strongly shapes Geelong's identity. The coastline from Limeburners Bay through Avalon to Point Wilson forms part of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site. This internationally significant wetland system supports extensive saltmarshes, seagrass beds and estuarine habitats, which are critical for migratory shorebirds and a wide range of marine and coastal species.

Geelong is also experiencing significant growth, particularly in the north and west, where urban expansion areas are being carefully planned to balance development with environmental protection. The Strategic Assessment process plays an important role in this work, taking a landscape-scale approach rather than assessing impacts on a site-by-site basis. This integrated approach is expected to deliver improved environmental outcomes by identifying and protecting key ecological values early in the planning process, while providing greater certainty for development. Additional mechanisms, such as Victoria's Native Vegetation Removal Regulations, support the avoidance, minimisation and offsetting of impacts on native vegetation across the municipality.

Further strengthening protection of key waterways, the Rivers of the Barwon (Barwon and Moorabool) Action Plan has led to the introduction of new and updated planning controls. These controls provide stronger policy direction for managing development along the Barwon and Moorabool river corridors, helping to protect environmental values, cultural heritage, landscape character and public access. Together, these measures reinforce a more coordinated, catchment-wide approach to river health and land use planning.

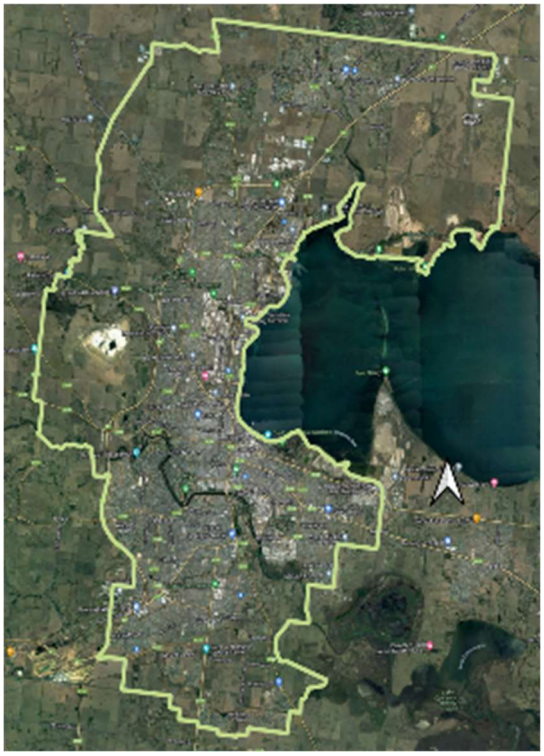

Figure 16. Map of the Geelong City landscape

CURRENT CONDITION

- Highly urbanised environment
- Most remnant vegetation exists in public land reserves, especially linear reserves along waterways and the coastline, and in nature reserves and open space areas
- Higher proportion of environmental volunteer groups than other landscapes (except the Bellarine).
- Map 10 mapped environmental values 45.
- Map 16 shows protection measures.

Table 4 provides a snapshot of some nature indicators for the Geelong City.

THREATS

- Climate change
- Expansion of urban areas into natural habitats
- Greater pressure (disturbance and pollution) on waterways, wetlands, and remnant vegetation.

OPPORTUNITIES

- Supporting community restoration of habitat corridors along urban waterways
- Home gardens and nature strips
- Working with Wadawurrung Traditional Owners on public land reserves
- Blue carbon opportunities in coastal saltmarsh areas
- Community engagement activities (Gardens for Wildlife, Nature Strip Plantings, Geelong Nature Forum).

KEY SPECIES AND HABITAT

Perridak (Platypus *Ornithorhynchus anatinus*)

Habitat: Geelong waterways with remnant instream and riparian habitat

The Platypus is a unique egg-laying mammal, known as a monotreme, found in the Barwon and Moorabool Rivers and Waurn Ponds Creek across Geelong. It is semi-aquatic and difficult to see, spending much of its time feeding in streambeds or sheltering in burrows along riverbanks, beneath vegetation roots, or among rocks and debris. Ideal Platypus habitat includes waterways with earth banks, shady native vegetation, logs and gravel substrates that support microinvertebrate (a main food source). Protecting and restoring Geelong's in-stream and riparian habitats is essential to survival of Platypus in the Geelong City Landscape.

Records of Platypus in the Barwon and Moorabool Rivers around Geelong are increasing, but the last recorded sighting in the Warun Ponds Creek was in 2003.

Figure 17. Perridak (Platypus)

[45] *Native Vegetation – City of Greater Geelong Biodiversity Mapping 2013 - 2025*

Little River

The Little River, *Worrin-yaloke*, flows from the Brisbane Ranges to Port Phillip Bay, forming large coastal wetlands. Lake Borrie, Spit Nature Conservation Reserve and the Western Treatment Plant are all part of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site. Together they support important habitat including kelp and seagrass beds, marine meadows, intertidal salt and freshwater marshes, sandy shorelines and mudflats.

Before the landscape beyond the Brisbane Ranges was largely cleared, River Red Gum (Eucalyptus camaldulensis) were the dominate tree species, scattered sparsely across the plains and along Litte River and other waterways. Bandicoots (Kwenda) and spotted tail quolls (Yoorn) were abundant on the grasslands, where they played crucial roles in maintaining soil and ecosystem health.

The Wadawurrung have a long connection with this landscape and were practicing sedentary agriculture long ago.

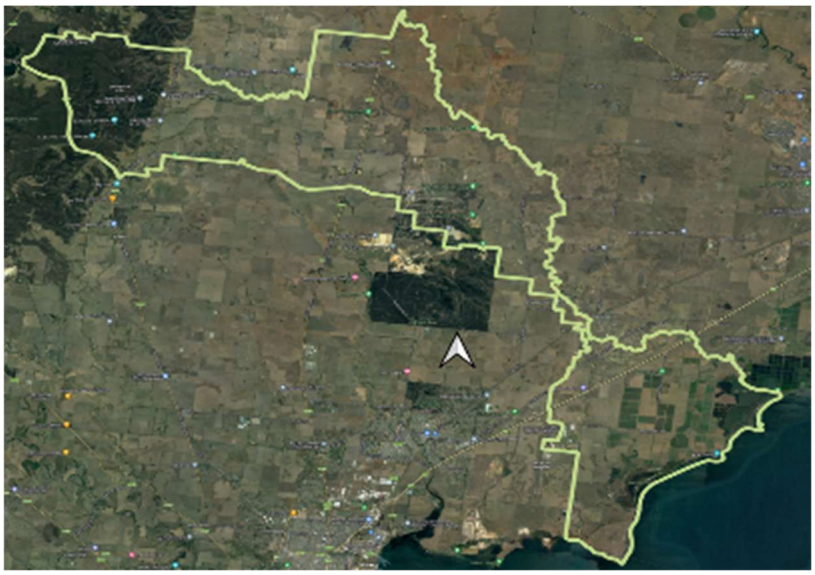

Figure 18. Map of the Little River landscape

CURRENT CONDITION

- High biodiversity values contained in public land reserves
- High value roadsides that surround the Brisbane Ranges, as well as the Old Melbourne Road
- Most native grasslands have been lost; however, the remnants that remain are often recoverable due to intact tussock structure, though they typically lack forbs and contain undesirable weeds.
- Map 11 mapped environmental values [46].
- Map 17 shows protection measures.
- Table 4 provides a snapshot of some nature indicators for the Little River.

[46] *Native Vegetation – City of Greater Geelong Biodiversity Mapping 2013 - 2025*

THREATS

- Climate change
- Pest plants and animals
- Loss of high value roadside vegetation
- Continued loss of grassland habitat on private land.

OPPORTUNITIES

- Blue carbon opportunities in intertidal areas
- Reviewed and amended planning controls
- Protection and restoration of high value roadsides
- Private land conservation and restoration programs focused on grasslands and grassy woodlands
- Working with Wadawurrung Traditional Owners
- Habitat connectivity and restoration along Little River
- Partnerships with Melbourne Water, Wyndham City Council, Grassy Plains Network, Victorian National Parks Association (VNPA) or North West Alliance

KEY SPECIES AND HABITAT

Fat-tailed Dunnart (*Sminthopsis crassicaudata*)

Habitat: Native Grasslands with cracking soils, rock piles and old logs

This small native marsupial lives in grasslands and open woodlands of the Victorian Volcanic Plains, where cracking clay soils provide shelter and foraging habitat[47]. It has yellow-brown fur, large ears and a pointed nose, and stores fat in its tail to survive low food periods. The Fat-tailed Dunnart is listed as threatened under the Victorian Flora and Fauna Guarantee Act (1988) with threats including habitat loss, competition from pest animals, predation by feral cats and foxes, and accidental harm through vermin control.

In the 1980s survey work around the Western Treatment Plant recorded several sites containing Fat-tailed Dunnarts some with multiple individuals. Very few have been recorded since.

Figure 19: Fat-tailed Dunnart

[47] State Wide Integrated Flora and Fauna Teams (SWIFFT) URL: https://www.swifft.net.au/cb_pages/sp_fat-tailed_dunnart.php (Accesed 18 Dec 2025)

Northern Uplands

The City includes a small section of the Northern Uplands landscape encompassing private land to the southwest of the Brisbane Ranges. This small section includes large areas of intact remnant vegetation remaining on private land, and the presence of old trees.

For the Wadawurrung people, this landscape including the nearby Brisbane Ranges, holds great cultural, social and spiritual significance.

CURRENT CONDITION

- High biodiversity values on private land, including large, old trees and standing dead trees
- High value roadsides.
- Map 12 mapped environmental values[48]
- Map 18 shows protection measures
- Table 4 provides a snapshot of some nature indicators for the Northern Uplands.

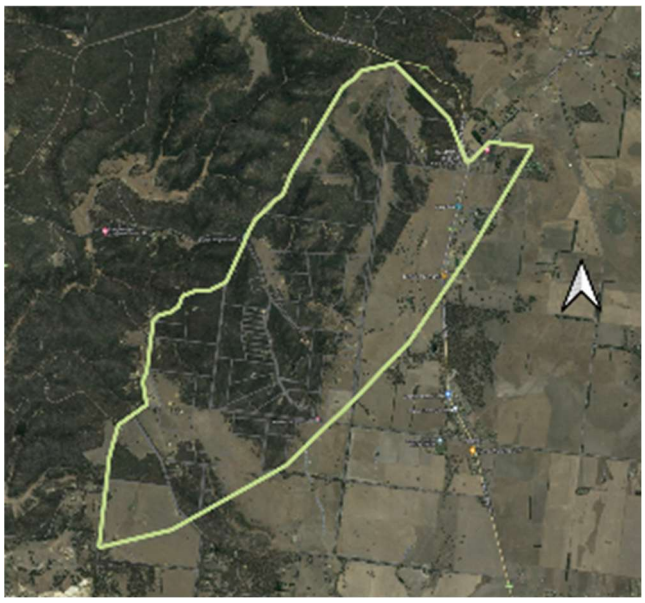

Figure 20. Map of the Northern Uplands landscape

THREATS

- Climate change – drier, hotter, more extreme events, longer fire season, migration/loss of native species and old trees
- Pest plants and animals
- Loss and degradation of high value roadside vegetation.

OPPORTUNITIES

- Protection of high value roadsides
- Private land conservation
- Protection of old habitat trees
- Supporting Wadawurrung Traditional Owners to undertake cultural burning
- Wildlife road crossings
- Koala habitat protection and restoration
- Partnership with Koala Clancey Foundation.

Figure 21. Ngaambulmum (Koala)

KEY SPECIES AND HABITAT

Ngaambulmum (Koala *Phascolarctos cinereus*)

Habitat: Dry eucalypt forests and large old gum trees like manna gums

Koalas rely on eucalyptus forests for both food and shelter. Across the Geelong region, threats include habitat loss, urban development, disease, vehicle strikes, dog attacks and climate change.

Regular monitoring of Koalas in the Geelong region by Koala Clancey indicate Koala numbers are in decline.

[48] *Native Vegetation – City of Greater Geelong Biodiversity Mapping 2013 - 2025*

Table 4 provides a snapshot of some indicators across the municipality (Djjlang) and the six landscapes.

Theme	Djilang	Barwon Plain	Bellarine	Basalt Plains	Geelong City	Little River	Northern Uplands
Remaining remnant vegetation and wetlands (estimated)	18%	1%	15%	21%	8%	31%	65%
Hectares managed by the City for nature conservation	1,358 (ha)	1.3 (ha)	845 (ha)	19 (ha)	465 (ha)	8.5 (ha)	19 (ha)
% of the total area in the municipality protected in the conservation estate	9.7%		13.7%	7.7%	3.4%	14%	5.9%
Number of Ecological Vegetation Classes (EVCs) mapped (including mosaics)	69	7	31	29	34	35	16
% of rare, vulnerable, and endangered EVCs mapped		86%	94%	90%	100%	80%	63%
Number of threatened species and ecological communities	191						
Number of Threatened species and ecological communities listed under the *EPBC Act*	42	6	24	21	31	27	1
Number of species listed under the *EPBC Act* with habitat on City managed land	24	6	21	12	19	18	1
Number of caring for environment, citizen science, and network groups	80	1	38	7	30	3	1
Number of caring for environment, citizen science, and network groups involved in managing City nature reserves.	39		21		17	1	

Refer Appendix 1, 2 and 3 for a list of threatened species and ecological communities, and a list of volunteer environmental groups and networks.

Goal 1: Value Wadawurrung Country and Culture

We will support Traditional Owners to care for and heal Country. As the original custodians of this landscape, Wadawurrung Traditional Owners hold deep knowledge of caring for Country built over thousands of generations. We have much to learn from the Wadawurrung in how we protect nature.

CONTEXT

Colonisation dispossessed Wadawurrung and other First Nations peoples of their Country. Protecting biodiversity in the Geelong region will also support the restoration and strengthening of connections to Wadawurrung cultural practices by preserving important totem species, bush foods and medicines.

This plan provides opportunities for Wadawurrung to apply their knowledge and skills in managing and conserving the City's natural environment, while enabling the broader community to learn from their stewardship of Country[49].

Through ongoing collaboration, we will work with Wadawurrung to understand cultural values across the landscape, manage nature reserves of high cultural and/or ecological value, and support the use of Wadawurrung language, stories and cultural practices in the City's natural areas.

This Plan supports a stronger, ongoing role for Wadawurrung in Caring for Country, and aligns with the principles and goals of *Paleet Tjaara Dja, the Wadawurrung Country Plan*.

We will also support opportunities for traditional ecological knowledge (TEK) exchange with community volunteers where this is led by and occurs with the free, prior, and informed consent of Wadawurrung, including through activities such as restoration programs and, where appropriate, cultural burning.

STRATEGIC OUTCOMES

- Increasing role of Wadawurrung in the management of the City's nature reserves
- Wadawurrung are leading identification, protection and management of cultural values
- Greater integration of Wadawurrung language, stories and cultural practice within the City's nature reserves.

TARGETS

- Establish active collaborative relationships between Wadawurrung and the City across five (5) nature reserves
- Complete two (2) Cultural Values Assessments (CVAs) of cultural landscape areas
- Incorporate Wadawurrung language, stories or cultural practice into the planning, design and management of:
    - new nature reserves of high cultural and/or ecological value
    - five (5) existing nature reserves.

- **74% of the area of City land managed as nature reserve falls within areas of cultural heritage sensitivity[50]**

[49] *Department of Environment, Land, Water and Planning (2017) Biodiversity 2037. Victorian State Government, Melbourne.*

[50] *Nature reserves layer in the City's Public Open Space spatial data (Accessed Dec 2025).*

Goal 2: Prioritise protection

The City's remaining native vegetation and habitat are limited and increasingly vulnerable. To maintain biodiversity, we must prioritise protection and restoration and long-term stewardship of what remains, while avoiding further loss. This requires a strong, coordinated focus on land use planning, other protection mechanisms, and collaborative action across public and private land.

CONTEXT

Only small and highly fragmented areas of remnant vegetation and habitat remain across the municipality on both public and private land. While limited, these remnants are vital for biodiversity, providing critical habitat for threatened flora and fauna species that have adapted over thousands of years to exist in these vegetation communities. These patches also offer complexity in vegetation age and structure that can take years to replicate, supply seeds for collection and conservation, and serve as important benchmarks to guide future revegetation and landscape recovery.

The City's internationally significant wetlands, including the Ramsar-listed Port Phillip Bay (Western Shoreline) and Bellarine Peninsula site, are vital biodiversity strongholds. They support tens of thousands of waterbirds and other wildlife, including rare and threatened species. These wetlands provide crucial breeding and feeding grounds and help reduce the impacts of climate change by providing natural flood mitigation, shoreline stabilisation and storm protection.

Artificial light at night and chronic noise disturbance are emerging pressures on biodiversity, particularly in coastal and wetland environments. Light pollution can disrupt the behaviour, navigation and breeding of migratory shorebirds, wetland birds, bats, insects and marine species, including within internationally significant areas such as Swan Bay and the Ramsar-listed wetlands. Similarly, ongoing noise from traffic, construction, watercraft and recreation can affect wildlife movement, communication and breeding success. Recognising and managing these impacts will be increasingly important as urban areas expand and visitation to natural areas grows.

Untreated and poorly managed stormwater runoff also poses a significant threat to wetlands, waterways and marine environments across the municipality. Runoff from urban areas can carry pollutants, sediments, nutrients and litter into sensitive ecosystems, degrading water quality and impacting vegetation and wildlife. These impacts are already evident in some wetland systems and are likely to increase with urban growth. Improving stormwater management at a catchment scale, including through integrated water management and nature-based solutions and stronger controls in new development areas, will be critical to protecting ecological values and supporting long-term environmental health.

Habitat is also found throughout the City in places such as our gardens and backyards, parks and green spaces, waterways, street trees, rooftop gardens and coastal areas. Together these areas provide critical refuges for wildlife.

With so little habitat remaining in the City, preventing further loss and protecting and enhancing what remains is critical.

Biolink areas have been identified throughout the City to guide where protection, connection and restoration actions will be prioritised. Further details are provided in Goal 3. Refer also to Maps 1 to 6 and Appendix 4 for further detail.

Many City-managed reserves contain areas of high-value remnant vegetation that provide critical habitat for threatened species. Strengthening protection of these areas through planning scheme overlays and, where appropriate, permanent protection mechanisms such as conservation covenants will be a key priority.

Landscape-scale planning and growth areas

Significant population growth is occurring in the north and west of the municipality. The Strategic Assessment process provides an important opportunity to move from a site-by-site approach to a landscape-scale approach to biodiversity protection. This includes the use of tools such as Native Vegetation Precinct Plans (NVPPs), which can deliver more coordinated and effective conservation outcomes by identifying and protecting key habitat areas early in the planning process.

Embedding biodiversity considerations into growth area planning will be essential to avoiding cumulative loss and ensuring long-term ecological resilience. This approach will also align with the Bellarine Distinctive Areas and

Landscapes framework, supporting the protection of valued landscapes and environmental features while guiding sustainable land use and development.

Protecting biodiversity through land use planning and other mechanisms

The City's conservation estate covers just 9.7% of the municipality and includes land managed by Parks Victoria, Corangamite CMA, Barwon Water, Coastal Committees of Management and the City, and a small portion of private land protected under Trust for Nature covenants. By protecting and conserving this conservation estate, and seeking opportunities to expand it, we will contribute to Australia's national '30 by 30' target to conserve 30% of landmass and marine areas by 2030.

Several wetlands in the City are listed under the Ramsar Convention as part of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site. This includes much of the Lake Connewarre wetland system, Swan Bay, Point Wilson / Limeburner's Bay and the Avalon coastal area. These wetlands are recognised internationally for their significant biodiversity and habitat values.

Beyond the conservation estate, small patches and linear strips of remnant vegetation persist along waterways, coastal areas, and roadsides and on private land. The Greater Geelong Planning Scheme provides regulatory mechanisms to protect and enhance vegetation and habitat values over the long-term, including the Vegetation Protection Overlay (VPO), Environmental Significance Overlay (ESO) and Significant Landscape Overlay (SLO). The Rural Conservation Zone (RCZ) guides subdivision and planning requirements for development and works that are compatible with conservation values, while the Public Conservation and Resource Zone (PCRZ) outlines permitted and prohibited activities that support the conservation purposes of the zone. Refer Map 7 to 12.

While these planning controls provide an important framework for protecting biodiversity, their effectiveness can vary depending on how they are applied and enforced. Strengthening the strategic use of overlays, alongside complementary tools such as covenants and stewardship agreements, will be important to achieve more meaningful and long-term protection outcomes.

A more proactive and strategic approach to protection will also consider future climate change impacts, including sea level rise, storm surge and shifting habitat and species distributions. Integrating climate modelling into planning and decision-making will help prioritise areas for in-situ protection and restoration, ensuring the long-term resilience of biodiversity across the landscape.

Protection of native vegetation is also regulated under Clause 51.17 of all Victorian Planning Schemes, with the most recent approvals associated with new urban development. Despite the City's planning permit and compliance processes, illegal vegetation removal continues to occur.

Biodiversity offsets are required under the Victorian planning framework, and while the City has limited influence over how the system operates, there are opportunities to support stronger local outcomes. The City will encourage a preference for offsets to be secured within the municipality where feasible, including by investigating ways to increase local offset supply (such as supporting landholders and establishing sites on Council-owned land). Where local options are not available, offsets may still be secured within the broader catchment. Avoidance and minimisation of vegetation removal will remain the priority, with offsets as a last resort.

Protecting biodiversity also requires improved stormwater management in new development, to ensure runoff is appropriately treated, retained and managed to minimise impacts on downstream waterways, wetlands and coastal environments.

Protecting biodiversity on private land

A significant proportion of high value remnant vegetation occurs on private land, particularly in rural areas, but only a small proportion is permanently protected, such as through conservation covenants. Working with private landholders is essential to protecting, enhancing and preventing any further loss. The City can support this through education, incentives and collaboration with organisations such as Landcare and Trust for Nature.

Conservation covenants, such as those administered by Trust for Nature, under the *Victorian Conservation Trust Act 1972*, along with Section 69 agreements under the *Conservation, Forests and Lands Act 1987*, Section 173 agreements under the *Planning and Environment Act 1987*, and other landholder agreements provide a range of mechanisms to permanently safeguard native vegetation on private land. However, their uptake can be limited due to perceived costs and constraints on land use. The City will support covenants while also exploring more flexible approaches, including conservation contracts and land management or stewardship agreements.

The City will provide incentives, stewardship support and technical advice, and continue to partner with Landcare and other organisations to support on-ground outcomes. Engagement will be strengthened by better targeting landholders most likely to participate in conservation activities.

As detailed above, planning scheme overlays, including VPO, ESO and SLO, will be applied to private land where significant biodiversity values exist, particularly within biolink areas and in rural and farming areas where larger or strategically important remnant vegetation is present.

Building internal capacity to protect and enhance nature

Achieving meaningful biodiversity protection requires a whole-of-City approach. This includes embedding biodiversity protection across all areas of our work, including policies, projects and operations. Strengthening ecological understanding across the City's departments helps ensure biodiversity is consistently considered in planning, infrastructure delivery, community programs and day-to-day decision-making, so that environmental impacts are identified and addressed early.

Providing practical training, tools and guidance will build capability and confidence to act for nature across the organisation. The City will take a coordinated approach to applying biodiversity considerations in planning, project delivery and asset management, so that environmental outcomes are clearly understood, assessed and managed across all activities. This will support a consistent standard of environmental management and position the City to lead by example in delivering best-practice outcomes for biodiversity, liveability and community wellbeing.

STRATEGIC OUTCOMES

- Contribution to the '30 by 30' target, with increased area of land under effective conservation management
- Expansion and strengthening of permanently protected areas, including City-owned reserves
- Increased protection of high-quality remnant vegetation, particularly in biolink areas and on private land
- More areas of remnant vegetation are permanently protected across both public and private land
- Greater and more strategic use of nature-based planning overlays (i.e. VPO, ESO, SLO) across both public and private land
- Improved protection of threatened species and habitats across nature reserves, open spaces and roadsides
- A greater proportion of vegetation offsets secured within the City
- Fewer instances of unauthorised vegetation removal
- Improved management of light and noise impacts on biodiversity, particularly in coastal, wetland and other high-value habitat areas
- Greater uptakes of conservation covenants, Crown frontage agreements and other stewardship agreements
- Nature and biodiversity considerations embedded across all relevant City policies, strategies and operational processes.

TARGETS

- Increase the level of protection for remnant vegetation within biolink areas, with a focus on patches greater than two (2) hectares
- Establish conservation protection for all remnant biodiversity patches larger than 10 hectares within biolink areas
- Increase the total area of remnant vegetation within the City's conservation estate and other public protected areas.
- Increase the total area of biodiversity permanently protected on private land or Crown water frontages (e.g., via Trust for Nature covenants, Section 69 Agreements, or Riparian management licences[51] or other protection mechanisms)

[51] DELWP (2021) https://www.forestsandreserves.vic.gov.au/__data/assets/pdf_file/0023/540716/DELWP-Crown-Water-Frontage_Riparian-Management-Licences.pdf

- Permanently protect five (5) City owned Nature Reserves through Trust for Nature Covenants or Section 69 Agreements[52]
- Achieve improved protection of threatened species and their habitat across City-managed nature reserves, open space and roadsides through the implementation of six (6) conservation action plans
- Increase the proportion of biodiversity offsets secured within the City
- Reduce the annual rate of vegetation clearing without a permit, including the loss of old trees
- Increase the integration of biodiversity protection into the City's policies, strategies and operational procedures
- Develop and implement guidelines or a policy to minimise light and noise impacts on biodiversity, with a focus on sensitive environments such as coastal areas, wetlands and biolink corridors.

[52] Section 69 of the *Conservation, Forests and Lands Act 1987*

Goal 3: Connect and restore

Healthy, biodiverse-rich ecosystems depend on being well-connected and resilient. To do this we must link remnant vegetation, restore degraded areas and create new habitat so native plants and animals can move, adapt and survive. Building this resilience is key, especially as our climate changes.

CONTEXT

The City has a responsibility to restore and expand native vegetation and habitat, so biodiversity is protected, strengthened and does not continue to decline. This commitment aligns with Victorian Government targets for achieving a **net gain in the extent of habitats by 2037[53] and recognises the importance of nature for** community health and wellbeing, and for future generations.

In a changing climate, restoring, connecting and expanding habitat is essential to help species survive and adapt. This includes supporting natural regeneration, undertaking revegetation programs, reconnecting fragmented habitats, restoring degraded waterways and wetlands, increasing habitat across urban areas and reducing threats such as pest plants and animals. Climate change is likely to amplify existing pressures, particularly in fragmented landscapes where species have limited ability to move in response to change. Well-connected, healthy habitats give our remaining species the best chance to persist and adapt.

Restoration efforts will also recognise the importance of freshwater systems across the municipality, such as degraded waterholes and small wetlands on the Bellarine. There is a significant opportunity to prioritise restoration of these systems, particularly around Drysdale and surrounding areas, through the creation and enhancement of freshwater habitats and improved ecological function.

Supporting insect populations is also critical to healthy ecosystems. Insects underpin food webs, pollination and soil processes, and increasing insect diversity helps support birdlife and other fauna. Opportunities exist to incorporate insect-friendly habitat into restoration projects and to expand citizen science initiatives to improve understanding of local biodiversity.

Public reserve management

The City manages a network of nature reserves providing important habitat for native plants and animals, including many threatened species. The reserves range from small 1 hectare urban parks to large reserves over 100 hectares with high biodiversity value. Even smaller reserves can be important for protecting remnant vegetation and supporting wildlife.

While some reserves have conservation or master plans, many are outdated or incomplete, and some reserves have no plan in place. Reviewing and updating management plans, particularly for reserves supporting threatened species, is a key priority.

Pest plants and animals are a major pressure across the City and threaten the success of restoration efforts. They compete with native species for resources, prey on native fauna, degrade habitat, cause erosion and disrupt ecosystem function. Established pest animals in the region include rabbits, foxes, feral cats and deer, many of which are declared under the *Catchment and Land Protection Act 1994* and well established across the municipality. Rabbits in particular pose a significant risk to revegetation outcomes by preventing plant establishment.

Pest plants also threaten regional biodiversity by invading native vegetation, providing harbour for pest animals and increasing fire risk.

Stronger, coordinated pest management across agencies, land tenures and municipal boundaries is required to effectively manage these impacts, including targeted control of rabbits, foxes, feral cats, deer and invasive bird species such as Indian Mynas, which outcompete native birds for nesting hollows and habitat.

Management of high value City reserves, particularly coastal reserves, also requires careful control of human pressures. For example, dogs on beaches can threaten species like the Hooded Plover. Hooded Plovers rely on the narrow strip of coastal land between the sea and dunes, which is already under pressure from climate impacts.

[53] Department of Environment, Land, Water and Planning (DELWP) (2017) *Protecting Victoria's Environment – Biodiversity 2037. Victorian State Government, Melbourne.*

Alleviating avoidable pressures, such as dogs in key habitat areas, will be critical to improving breeding success and species' resilience.

Coastal and marine environments are also affected by recreational activities. Pressures such as boat disturbance, trampling of sensitive habitats including rock platforms, illegal shellfish harvesting and marine litter can degrade habitat and disrupt wildlife. Managing these impacts will be important to protect biodiversity values across coastal and marine ecosystems.

Domestic and feral cats also threaten native wildlife. Cats prey on a wide range of native animals including reptiles, birds, mammals, frogs and invertebrates. Research suggests that on average, each pet cat allowed to roam (even for only part of the day or night) kills 186 reptiles, birds and mammals per year in Australia, including 110 native animals. That averages out to more than two native animals per cat per week[54]. While a municipal dusk-to-dawn curfew is in place, the City will focus on community education and behaviour change to encourage responsible pet ownership and voluntary containment, supported by targeted programs in nature reserves.

Feral cats will continue to be targeted in broader pest management programs and in conjunction with surrounding land managers, such as Bellarine Bayside Committee of Management, Barwon Coast Committee of Management and Parks Victoria.

Linear reserves

The City manages extensive linear habitats, including rural roadsides, waterways and rail corridors, which provide critical opportunities to connect fragmented landscapes.

Rural roadsides can support high quality native vegetation and provide important wildlife corridors. Some of the most intact and diverse remnant vegetation within the municipality occurs in the roadside reserves, with approximately 300 kilometres (540 hectares) mapped as having high conservation value. Across Western Victoria about 30 percent of known native grasslands occur on roadsides. Within the City, Old Melbourne Road between Lara and Little River represents Geelong's largest roadside grassland reserve.

Urban nature strips also provide opportunities for restoring biodiversity, while delivering other community benefits. When planted with native vegetation, they can provide nesting and feeding sites for native animals, increase insect diversity, connect green spaces, help manage stormwater, help cool neighbourhoods and improve air quality. The City supports residents to plant their nature strips through our Nature Strip Guidelines and Specifications (2024).

Waterways and rail reserves form additional linear nature corridors, such as along the Bellarine Rail Trail Reserve, offering valuable connectivity across the landscape. Even degraded creeks and small tributaries can be restored to strengthen habitat links and improve ecological function.

Many community groups already have strong connections to their local waterways, and people tend to connect most with places close to home, regardless of their condition[55]. This presents a real opportunity to engage the community in restoring biodiversity and improving connectivity across the City's waterways.

Biolinks areas

Biodiversity corridors (or biolinks) are connected areas of habitat across the landscape. They allow plants and animals to move between habitats to find food, water and shelter. By improving connectivity, biolinks help species adapt to climate change, provide refuge and support the natural movement of wildlife. They also help to reduce future greenhouse gas emissions by storing carbon within native vegetation.[56]

Maps 1 to 6 highlights the key biodiversity areas and connections within the City . These include riparian vegetation corridors along waterways such as the Barwon River, and along roadsides and the coastal fringe, as well as biodiversity zones (including Avalon, Brisbane Ranges and Lake Connewarre), along with key habitat and restoration nodes. The City has also identified and mapped biolink opportunities in each of the six landscapes, as detailed in the Landscapes section above.

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54 *Threatened Species Recovery Hub (date n/a).The impact of cats on Australian wildlife*. URL: https://www.nespthreatenedspecies.edu.au/media/dehnttbf/7-4-the-impact-of-pet-cat-impacts_f.pdf (Accessed 6 March 2025)

55 *Department of Environment, Land, Water and Planning (2022). My Victorian Waterway: Social research to understand the community's connection to Victorian waterways. Full report prepared by Quantum Market Research for the Victorian State Government, Melbourne.*

56 *https://www.dcceew.gov.au/environment/biodiversity/conservation/wildlife-corridors ((Accessed 29 December 2024).*

Implementation of these priorities will be guided by the Geelong Biolinks Plan and broader Geelong Biolink Project, which provide the strategic and collaborative framework for delivering connectivity outcomes across the municipality.

These biolinks also provide an important opportunity to link new estates with established suburbs through green corridors and nature-based infrastructure, strengthening connectivity for both biodiversity and the community.

Biolink areas set the priority for where protection, connection and restoration efforts will be targeted (refer Maps 1 to 6 and Appendix 4). These corridors can also support multiple uses, including shared trails and other linear infrastructure, where designed appropriately. A multidisciplinary approach that considers ecological, recreational and community values will be critical to the success of these spaces.

In addition to vegetation connectivity, safe wildlife movement across the landscape must be considered, particularly for larger species such as kangaroos and wallabies. Identifying and protecting key movement corridors, and incorporating appropriate crossing infrastructure where required, will help reduce habitat fragmentation and wildlife mortality.

Coastal biolinks are a key priority, particularly along Corio Bay and the Bellarine Peninsula, where significant opportunities exist to restore and reconnect saltmarsh, mangrove and dune systems. Prioritising the protection of existing coastal vegetation, alongside targeted restoration and habitat reconnection, will be critical to strengthening ecological function and resilience in these environments. These priorities will be guided by the Geelong Biolinks Project and supporting mapping, which identifies coastal corridors and restoration nodes as priority areas for action.

Supporting wildlife

Built-up areas also play an important role in supporting wildlife. Urban parks, private gardens, street trees, waterways and built infrastructure can provide shelter, food and movement pathways for many native species, particularly in highly modified landscapes.

Wildlife in urban areas and peri-urban areas is increasingly exposed to risks such as vehicle strikes, attacks by pets, entanglement and ongoing habitat loss, which can result in injury, displacement or mortality. Road networks and expanding development can create significant barriers to movement, particularly for larger species such as kangaroos and wallabies that rely on established movement patterns across the landscape.

Improving outcomes for wildlife will require greater recognition of safe movement corridors, alongside habitat restoration. This includes identifying and protecting key movement pathways and, where appropriate, supporting interventions such as crossings and other measures that reduce conflict between wildlife and infrastructure.

The City recognises the important role of wildlife carers and community responders who support injured and orphaned animals. It will continue to work with partners to improve awareness, reduce risks to wildlife and support effective responses to wildlife injury and care across the municipality.

The City’s broader open space network, including local parks and pocket parks, also provides important opportunities to support biodiversity in urban areas. Small-scale interventions such as retaining unmown grass areas, installing nesting boxes, planting diverse indigenous vegetation and creating insect-friendly habitats can significantly enhance ecological value. These spaces contribute to habitat connectivity, support pollinators and other fauna, and help bring nature closer to the community.

Private land conservation

Achieving real biodiversity outcomes requires restoration action across both public and private land. Given the significant proportion of land in private ownership, real gains will not be possible without strong participation from landowners across both rural and urban areas.

Alongside permanently protecting remnant vegetation through planning controls and conservation covenants, the City will work with and support private landholders to restore and expand biodiversity on their properties. This includes encouraging natural regeneration, revegetation and threat management, and participation in building biolinks and connectivity across the landscape, especially for woodlands, grasslands, old trees and along the edges of farm dams. Stewardship incentives such as small grants or rate-based mechanisms may be used support these actions.

The City will support nature-friendly land management approaches, including in agricultural areas, and promote initiatives such as Nature Friendly Farming and similar programs that integrate biodiversity outcomes with productive land use. Stewardship incentives, technical advice and partnership programs will be used to support these actions, with a focus on achieving coordinated, landscape-scale outcomes.

Urban residents also have an important role to play. Programs such as Gardens for Wildlife support community members to create more biodiverse, wildlife-friendly gardens. Residents can also contribute to the City's goal of achieving 30% urban canopy cover by planting trees in backyards and on nature strips.

STRATEGIC OUTCOMES

- More biolinks are restored and established across the City landscape
- Increased biodiversity restoration on private and public land
- Expanded and improved habitat quality on City managed land
- Wider use and increased diversity of indigenous plant species across City-managed areas and projects
- Improved protection of wildlife in areas with high community interaction areas, such as roads and new development sites
- Increasing populations of the City's six (6) representative wildlife species and improved condition of their habitats
- Greater access to natural open space and nature-based experiences for residents in "nature-poor" suburbs.

TARGETS

- Establish 150,000 indigenous plants, and restore a further 50 hectares of habitat within City managed biolink areas
- Increase the use and diversity of indigenous plant species across City-managed areas and projects
- Increase natural regeneration to achieve 10 plus hectares of additional vegetation within nature reserves
- Complete biodiversity restoration works across 1,000 hectares of private land in biolink areas through City supported incentive programs
- Reduce the extent and impact of high-threat weeds across City-managed nature reserves and roadsides
- Reduce pest animal populations within City managed nature reserves and roadsides
- Reduce the impacts of dogs in high value wildlife areas, including City-managed coastal reserves
- Reduce the impacts of domestic cats on biodiversity across the City's urban areas
- Increase biodiversity restoration across open space reserves within biolink areas.

Goal 4: Foster stewardship and strong partnerships

Lasting protection and restoration of the City's biodiversity and natural assets can only be achieved through strong partnerships and an engaged community. **By working together to share knowledge, pool resources, and strengthen stewardship, we can create real change that endures for future generations.**

CONTEXT

Research shows that **connecting people with nature** enriches lives, improves health and wellbeing, and fosters positive environmental attitudes and values that can promote a lifelong relationship with nature[57]. Connecting people with nature can also be the catalyst that drives environmental stewardship. Ensuring that opportunities to connect with nature are inclusive and accessible to people of all abilities is essential to achieving this. This includes removing physical, social and informational barriers so that all members of the community can participate in and benefit from nature.

We are also committed to supporting, improving, and expanding the environmental volunteer sector in the City. This aligns with the Victorian Government's target of **five million Victorians acting to protect the natural environment by 2037[58]** and the City's own *Environment Strategy 2020-30* target to **engage 100,000 people in nature education and conservation by 2030.**

Environmental volunteering

The City benefits from a strong network of individuals and community groups who actively restore habitat, protect threatened species and waterways, and help to deliver sustainability programs. Around 90 environmental volunteer groups operate across the City, most focused on caring for nature, including 36 groups that work on City managed land. Refer Appendix 3 for further details.

Engagement is also growing across schools and other public and private organisations. Many primary schools participate in environmental programs, reflected in high levels of involvement in the Geelong Nature Festival. Corporate interest is also increasing, with organisations keen to engage their staff in local conservation activities. For example, the City has partnered with the Geelong Football Club to offer Geelong AFLW members a *Green Cats* membership option. Geelong AFLW players have joined the City to plant trees along the Moorabool River at Fyansford over two consecutive years since 2023.

Community preference is shifting toward practical, outdoor and short-term volunteering, such as planting and clean-up events. These activities are consistently popular and align with volunteer data from across Victoria, where increasingly people are seeking meaningful, one-off event-based volunteering opportunities as opposed to long-term commitments[59]. Ensuring volunteer opportunities are accessible and inclusive for people of all abilities will also be important in broadening participation across the community.

Volunteering across the City is uneven, with most groups based on the Bellarine (46%) and in the Geelong City area (41%). Across the city, around 81% of volunteer environment groups focus on caring for nature, citizen science or network activities.

Research highlights several challenges facing the environmental volunteering sector. While people continue to sign up to volunteering, they are committing fewer hours than in the past. Increasing time pressures within the community make it more difficult to attract new volunteers and sustain a reliable volunteer workforce. Environmental volunteers also tend to be older than the wider volunteering sector, and the sector lacks diversity, with fewer volunteers from culturally and linguistically diverse (CALD) communities, who are more likely to engage in informal rather than structured volunteering.

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57 *Department of Environment, Land, Water and Planning (2017) Biodiversity 2037. Victorian State Government, Melbourne.*

58 *ibid.*

59 *Department of Environment, Land, Water and Planning (2018) Victorians Volunteering for Nature: Environmental Volunteering Plan. Victorian State Government, Melbourne.*

A 2018 volunteer survey[60] explored what would encourage and support people to participate in environmental volunteering. The findings show that volunteers are looking for:

- Greater flexibility in how and when they volunteer, so they can balance their contribution with family, work, study and caring responsibilities.
- More event-based volunteering that allows for short-term meaningful commitments. They also want these opportunities easier to find, as they are not always accessible or readily available.
- Meaningful volunteer roles and recognition for their efforts. Many volunteers want to feel valued by the organisations they work with, while some are seeking to volunteer through their workplace or are looking for pathways to employment and skills development.
- Simplified administration and legal requirements to make it easier for both volunteer groups and individual volunteers to participate.

Schools and environmental education

Schools can play a critical role in building long-term environmental stewardship across the City. The City will work with early learning centres, primary and secondary schools to embed environmental education as part of learning and community connection to nature. Opportunities will prioritise whole-school approaches that integrate sustainability into school culture, operations and curriculum, supporting student led action and positive nature-based behaviour change. Schools will also be supported to provide opportunities for students to contribute to and inform implementation of the Plan.

Private land stewardship

Although the City has many active environmental volunteer groups, many are working on public land reserves or on private land via an existing landholder connection. To strengthen biodiversity outcomes, we also need to work directly with individual landholders (especially those not already involved with a volunteer group such as Landcare) to protect and enhance habitat on their property and its long-term stewardship. The City can help by providing incentives to encourage landholders to apply for conservation covenants or adopt other sustainable land management practices.

Agency partnerships

Caring for nature in the City also requires strong collaboration with our agency partners (particularly the Corangamite CMA, Barwon Water, Melbourne Water and the Department of Energy, Environment and Climate Action (DEECA), as well as other public land managers (e.g. Parks Victoria and coastal committees), policy makers, private businesses and industry. Nature isn't bound by management boundaries, so it is essential that we coordinate our efforts with other agencies and neighbouring municipalities. The private sector can also play an important role in the protection and enhancement of nature in Geelong.

The City will strengthen coordination and shared delivery with key partners including neighbouring municipalities and the Borough of Queenscliff, recognising shared landscapes and ecological systems across the Bellarine.

The City will also expand partnerships with the corporate sector, philanthropic organisations, Deakin University and The Gordon to support research, innovation and delivery of nature-positive outcomes. This includes supporting voluntary corporate stewardship programs and encouraging investment in biodiversity protection, restoration and management on private land.

Connecting people with nature in "nature poor" areas

Across the City there are areas where nature, and access to natural areas, is scarce. These "nature poor" areas include our northern suburbs such as Corio and Norlane. Improving access to nature in these areas is a priority to address inequities in health and wellbeing and environmental outcomes. All residents should be able to experience and benefit from nature, regardless of where they live or their level of ability.

In nature poor areas, we will prioritise investment and planning responses that increase urban biodiversity and access to nature, including strengthening development standards and supporting programs such as the Gardens for Wildlife program, Nature Strip Planting initiative, Schools for Wildlife and targeted tree planting using indigenous species. This

[60] *ibid.*

includes ensuring that open spaces and natural areas are designed or retrofitted to be physically accessible, inclusive and welcoming for people of all abilities.

STRATEGIC OUTCOMES

- Broader and more diverse community participation in nature conservation across the City
- Increasing biodiversity knowledge and awareness across the City and the wider community
- Stronger and more effective partnerships are supporting and enhancing biodiversity outcomes across the City
- Improved access to nature for people of all abilities across the City
- Stronger collaboration across agencies, education providers, industry and community partners to deliver coordinated biodiversity outcomes.

TARGETS

- Increase the number of Geelong residents connected and engaged with nature
- Increase participation in the Geelong Nature Festival and other community-based nature activities
- Deliver a minimum of twenty (20) targeted activities per year to increase participation by culturally and linguistically diverse (CALD) communities in environmental education and nature related activities
- Deliver a minimum of twenty (20) targeted activities per year to increase participation by young people in environmental education and nature related activities
- Increase the number of Geelong residents volunteering in nature-related activities
- Increase participation in citizen science programs
- Establish baseline levels of community awareness and participation through surveys.

Goal 5: Build resilience to a changing climate

Evidence shows that ecological change in response to climate change is unavoidable, widespread and substantial. Our ability to manage biodiversity through these changes depends on **understanding how ecosystems might change and identifying places where biodiversity has the greatest potential to persist into the future[61].**

CONTEXT

The City's natural assets will be impacted by climate change. These impacts are well documented and have already been discussed in this Plan (refer to Drivers of Change above).

Our focus must shift to building the resilience of natural systems to adapt and persist under a changing climate. The City's natural assets are adaptive as they have persisted through climate change in the past, however, their capacity to continue to adapt has been compromised by changes such as fragmentation, competition for water use and the introduction of non-native plants and animals.

The best way we can help nature adapt to climate change will be largely reflected in how we manage our catchments and landscapes into the future. However, the potential scale, timing and severity of a changing climate may mean our traditional approaches may not be enough. We may have to change or even transform how we manage these systems, because the natural assets themselves may change dramatically[62].

The City will apply a structured and adaptative approach to climate change that focuses on selecting the most appropriate type and scale of intervention for each natural asset. This approach recognises that responses may range from strengthening existing management practices, through to implementing new approaches or fundamentally changing how systems are managed where necessary.

This will be informed by an ongoing assessment process that considers the condition, significance and vulnerability of natural assets to climate change, including their exposure, sensitivity and capacity to adapt. Based on this assessment, management responses may include:

- **Strengthening resilience** through improvements to existing practices where the magnitude of change is small and predictable. Adaptation can occur through incremental changes to the current management of natural assets, for example, such as fencing waterways to exclude stock and enable recovery, reducing pressures from pests or removing dogs from sensitive wildlife areas to alleviate their compounding impact on vulnerable species. These actions aim to support ecosystems to retain their function and capacity to adapt.
- **Supporting transition** where the magnitude of change is greater or less predictable, requiring more substantial changes to management approaches and the introduction of new measures. This may include restoring ecological processes, assisting species movement within landscapes, or changing water regimes at wetlands, such as the Sparrovale Wetland Reserve *Nubitj-yoorree*, to support vulnerable species adapt to projected reductions in stream flows.
- **Enabling transformation** where change is extensive and systems are unlikely to persist in their current form. This may require fundamentally different approaches to the management of natural assets, including innovative or engineered solutions. Examples include relocating fish populations from small climate vulnerable creeks to larger permanent waterways, or creating artificial reef to mitigate coastal climate change impacts and create new habitat for vulnerable marine species.

This approach will ensure that management actions are proportionate to risk, evidence-based, and responsive to changing conditions. Recognising that ecosystems are dynamic, this assessment will be regularly reviewed and

61 *Corangamite Catchment Management Authority (2024) Corangamite Regional Catchment Strategy. Corangamite CMA, Colac.*

62 *ibid.*

updated over time, incorporating monitoring results, new information and updated climate projections. This will enable the City to adapt its management approach as natural assets respond to climate pressures.

Supporting climate adaptation also creates opportunities for the City, such as the creation of new habitats and green spaces that will benefit the community. Public open spaces across the City can contribute to habitat restoration and ecological connectivity, and the City has committed to restoring biodiversity within modified urban landscapes through the City's Environment Strategy. Urban open spaces, which include parks, gardens, recreational reserves, drainage reserves and streetscapes, will become increasingly important refuges for native wildlife and the community, as the climate warms. These spaces can also help reduce the heat island affect in the City. Urban greenspaces may also play an important role in allowing movement of species across the landscape in response to changes in climate and other pressures.

Biolink planning will adopt a climate-responsive approach to ensure ecological connectivity remains functional into the future. This includes considering projected climate conditions when identifying priority areas, supporting species movement and range shifts, and recognising that ecological networks are dynamic and will need to adapt over time. Flexible and connected landscapes, rather than fixed corridors, will be prioritised and regularly reviewed as conditions change.

The protection of blue and teal carbon ecosystems presents another important opportunity for the City to achieve greater biodiversity outcomes, build the resilience of natural systems to respond to climate change, limit the amount of carbon released into the atmosphere and contribute to carbon emission offsets. Blue carbon is the carbon stored in coastal and marine ecosystems. Teal carbon is the carbon stored in inland freshwater wetlands. Protection of these ecosystems provides protection from coastal storm surges and inland flooding and helps to mitigate erosion.

These ecosystems provide habitat for a range of estuarine and freshwater species including migratory bird and commercially important fish species (supporting both mature and juvenile life stages). They also contribute towards improved water quality and nutrient cycling[63]. Across the City, there are significant opportunities to protect and restore blue and teal carbon ecosystems.

The City of Greater Geelong has already taken an innovative approach to combat coastal erosion and inundation on the Bellarine Peninsula, while creating new habitat. Projects such as the Ramblers Reef Foreshore Project in Portarlington and the Eco Reef in Clifton Springs are prime examples. Since the installation of the Ramblers Reef in 2018, the project has expanded beach and foreshore habitat and reduced coastal inundation events. Seagrass is also thriving again the shallow waters, further enhancing ecological health.

STRATEGIC OUTCOMES

- Improved understanding of climate change impacts on natural areas, with adaptation and mitigation measures embedded in decision making
- Increased protection and restoration of blue and teal carbon ecosystems across the City
- Improved outcomes within the City open space reserves as the climate changes
- Improved stormwater management to avoid and minimise negative impacts on the natural environment.

TARGETS

- Ensure climate change considerations are embedded across all relevant decision making processes
- Increase the implementation of nature and eco-system-based solutions to minimise the negative impact of climate change on natural systems
- Increase the extent of blue and/or teal carbon ecosystems protected and restored
- Reduce impacts of stormwater on receiving environments and nature through the application of Integrated water management solutions and other stormwater management innovations in growth areas.

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63 *Vic Catchments (2024) Blue and teal carbon investment opportunities in Victoria. URL: https://viccatchments.com.au/wp-content/uploads/2024/06/Blue-and-Teal-Carbon_FINAL-WEB-1.pdf (Accessed 25 August 2024)*

Action Plan

This section of the Plan presents the actions that the City will deliver to help achieve the ten-year strategic objectives and targets for each of the five Goals. The actions are short-term, intending to be delivered over the next one to two years, after which the action plan will be reviewed and updated. These short-term actions are outlined in Table 4 below. While some actions apply to a specific landscape, others will be implemented City wide.

Note **supplementary actions to be implemented if time and resources allow.

The landscapes are described as:

Djilang – Geelong wide (whole of municipality) **BaP –** Basalt Plains **Bell –** Bellarine **BwP –** Barwon Plains

GC – Geelong City **LR** – Little River **NU** – Northern Uplands

Table 5. Plan for Nature actions to be delivered over the next three years

Goal	Strategic Outcomes (10 years)	Targets (10 years)	Actions (2 years)	Landscape							Resourcing
				Djiang	BaP	Bell	BwP	GC	LR	NU	
Value Wadawurrung Country & culture	• Increasing role of Wadawurrung in the management of the City's nature reserves • Wadawurrung are leading identification, protection and management of cultural values • Greater integration of Wadawurrung language, stories and cultural practice within the City's nature reserves.	• Establish active collaborative relationships between Wadawurrung and the City across five (5) nature reserves • Complete two (2) Cultural Values Assessments (CVAs) of cultural landscape areas • Incorporate Wadawurrung language, stories or cultural practice into the planning, design and management of: ○ new nature reserves of high cultural and/or ecological value ○ five (5) existing nature reserves.	1) Meet with Wadawurrung Traditional Owners Aboriginal Corporation (WTOAC) four (4) times each year to support collaborative actions that strengthen connections between culture and nature.	✓							BAU
			2) Identify City nature reserves where WTOAC can lead or partner in conservation management, and undertake two (2) traditional ecological practices, for example, cultural burning. This would include opportunities to share traditional ecological knowledge with community volunteers involved in restoration, where appropriate.			✓		✓	✓		BAU
			3) **a) Identify and prioritise landscapes suitable for Cultural Values Assessment by WTOAC b) Commence one (1) Cultural Values Assessment.	✓							Resource Required
			4) a) Incorporate Wadawurrung language and stories at two (2) existing City nature reserves, through naming, interpretative displays and/or other activities b) Prioritise new nature reserves for similar treatment, aligning with the City's *Place Naming Policy* 2025.			✓		✓	✓		BAU
Prioritise protections	• Contribution to the '30 by 30' target, with increased area of land under effective conservation management • Expansion and strengthening of permanently protected areas, including City-owned reserves • Increased protection of high-quality remnant vegetation, particularly in biolink areas and on private land • More areas of remnant vegetation are permanently protected across both public and private land • Greater and more strategic use of nature based planning overlays (i.e. VPO, ESO, SLO) across both public and private land • Improved protection of threatened species and habitats across nature reserves, open spaces and roadsides • A greater proportion of vegetation offsets secured within the City • Fewer instances of unauthorised vegetation removal • Improved management of light and noise impacts on biodiversity, particularly in	• Increase the level of protection for remnant vegetation within biolink areas, with a focus on patches greater than two (2) hectares • Establish conservation protection for all remnant biodiversity patches larger than 10 hectares within biolink areas • Increase the total area of remnant vegetation within the City's conservation estate and other public protected areas. • Increase the total area of biodiversity permanently protected on private land or Crown water frontages (e.g., via Trust for Nature covenants, Section 69 Agreements, or Riparian management licences or other protection mechanisms) • Permanently protect five (5) City owned Nature Reserves through Trust for Nature Covenants or Section 69 Agreements • Achieve improved protection of threatened species and their habitat across City-managed nature reserves, open space and roadsides through the implementation of six (6) conservation action plans • Increase the proportion of biodiversity offsets secured within the City • Reduce the annual rate of vegetation clearing without a permit, including the loss of old trees	5) a) Review the planning scheme (including the environmental zones, overlays, and local policy) to ensure sufficient protection for areas of environmental significance and to enhance biodiversity. b) Prepare planning scheme amendment(s) to implement the Environment Strategy and Plan for Nature and recommendations of the planning scheme review on environmental matters.			✓		✓	✓		Resource Required
			6) Develop management standards to ensure stronger recognition and protections for areas of environmental significance within biolink areas.	✓							BAU
			7) a). Secure permanent protection for two (2) new and existing City owned Nature Reserves through Trust for Nature Covenants or Section 69 Agreements. b) Actively promote and support private landholders to establish Trust For Nature covenants through the City's incentives program.			✓		✓	✓		BAU/Grant
			8) **Prepare and implement conservation action plans to provide a coordinated protection and management framework for threatened species and their habitats located on City managed land.	✓							Resource Required
			9) a) Prepare two (2) conservation plans for EPBC listed species located on City managed land: 1. Grey Headed Flying Fox 2. Growling Grass Frog. b) Enhance the management, protection, and restoration of Bellarine and Melbourne Yellow Gum Woodlands to provide better habitat support for the Swift Parrot		✓	✓	✓	✓	✓	✓	BAU
			10) **a) Develop guidelines to promote retention of important habitat not protected under native vegetation regulations; for example, planted areas of vegetation, and large old, planted trees, as well as for wildlife without threatened species protection b) Develop a process/framework to better support wildlife (e.g. kangaroos) in areas of high community interaction like roads and new development areas c) Promote the Hollows Hunt App, ensuring the information is readily accessible for decision making.	✓							Resource Required
			11) **a) Investigate funding opportunities to acquire more land for nature reserves, prioritising high-quality vegetation and habitat not commonly represented in reserves **b) Advocate for Open Space (Clause 53.01) style contributions to be added as a requirement for subdivision to support protection and enhancement of biodiversity in growth areas" or similar.	✓		✓	✓		✓		Resource Required

Goal	Strategic Outcomes (10 years)	Targets (10 years)	Actions (2 years)	Landscape							Resourcing
				Djiang	BaP	Bell	BwP	GC	LR	NU	
	coastal, wetland and other high-value habitat areas • Greater uptakes of conservation covenants, Crown frontage agreements and other stewardship agreements • Nature and biodiversity considerations embedded across all relevant City policies, strategies and operational processes.	• Increase the integration of biodiversity protection into the City's policies, strategies and operational procedures • Develop and implement guidelines or a policy to minimise light and noise impacts on biodiversity, with a focus on sensitive environments such as coastal areas, wetlands and biolink corridors.	12) **a) Identify priority sites within the City suitable for retaining future vegetation offsets. **b) Assess the costs and benefits of purchasing land with high quality remnant vegetation for offset purposes. **c) Actively promote benefits of participating in the vegetation offset market to private landowners. d) Develop an internal policy that prioritises securing vegetation offsets within the municipality, including through first-party offset sites on City-managed land (e.g. expansion of existing sites such as Sparrovale Wetlands Reserve - Ngubitj yoorree), with a tiered approach allowing offsets within the broader Corangamite CMA and Melbourne Water regions where local offsets are not feasible.	✓							Resource Required
			13) a) Improve access to high quality biodiversity information to support better decision making for the protection and management of nature b) Review the City's biodiversity mapping program, identify gaps, determine future directions, and undertake updated mapping c) Use technology to improve biodiversity mapping and provide better community access and input d) Develop a process to consolidate all City-wide biodiversity mapping into a central system, starting with reserve handovers e) Use Artificial Intelligence (AI) to develop an index that tracks the City's response to nature protection and management to inform decision making.	✓							BAU/Grant
			14) Develop a methodology to enable natural assets to be accounted for in the City's corporate asset accounting systems.	✓							BAU/Partnership
			15) a) Develop a City-wide Environmental Incident Reporting System b) Educate landholders about native vegetation regulations and their responsibilities, targeting identified compliance hotspots c) Actively promote and enforce legislation to prevent and reduce illegal removal for native vegetation and habitat d) Review the City's processes around incidents regarding the illegal removal of native vegetation and habitat.	✓							BAU
			16) a) Introduce mandatory Green Card Accreditation requirements for relevant City staff and contractors b) Deliver two (2) Green Card Training opportunities for City staff and contractors.	✓							BAU
Connect & restore	• More biolinks are restored and established across the City landscape • Increased biodiversity restoration on private and public land	• Establish 150,000 indigenous plants, and restore a further 50 hectares of habitat within City managed biolink areas • Increase the use and diversity of indigenous plant species across City-managed areas and projects	17) Undertake appropriate restoration and biolink planning for each landscape, which could make use of landscape scale conservation action plans. This should include targets for permanent protections for each landscape.	✓							BAU/New Funding
			18) a) Develop the Geelong Biolinks Project b) Prioritise City regreening programs to within City-managed biolinks c) Establish 30,000 indigenous plants across City-managed priority biolinks, and through natural regeneration, create 10 hectares of new habitat.	✓							

Goal	Strategic Outcomes (10 years)	Targets (10 years)	Actions (2 years)	Landscape							Resourcing
				Djiang	BaP	Bell	BwP	GC	LR	NU	
	• Expanded and improved habitat quality on City managed land • Wider use and increased diversity of indigenous plant species across City-managed areas and projects • Improved protection of wildlife in areas with high community interaction areas, such as roads and new development sites • Increasing populations of the City's six (6) representative wildlife species and improved condition of their habitats • Greater access to natural open space and nature-based experiences for residents in "nature-poor" suburbs.	• Increase natural regeneration to achieve 10 plus hectares of additional vegetation within nature reserves and City managed biolink areas • Complete biodiversity restoration works across 1,000 hectares of private land in biolink areas through City supported incentive programs • Reduce the extent and impact of high-threat weeds across City-managed nature reserves and roadsides • Reduce pest animal populations within City managed nature reserves and roadsides • Reduce the impacts of dogs in high value wildlife areas, including City-managed coastal reserves • Reduce the impacts of domestic cats on biodiversity across the City's urban areas • Increase biodiversity restoration across open space reserves within biolink areas.	19) a) Expand the landowner incentives programs to include rural properties within biolink areas b) Complete 300 hectares of biodiversity restoration works on private land within biolink areas.		✓	✓	✓		✓	✓	BAU/New Funding
			20) Facilitate delivery of the Geelong Biolinks Project through an agreement (i.e. Memorandum of Understanding) with environment groups and networks.	✓							New Funding
			21) a) Prepare a conservation action plan for nature reserves to guide restoration and management, incorporating community and Wadawurrung input where relevant. b) Increase the extent of vegetation in nature reserves by three (3) hectares through natural regeneration c) Establish a monitoring program to map biodiversity quality improvements at ten (10) nature reserves.			✓	✓	✓	✓	✓	BAU
			22) **Develop a method to capture and report on the contribution of natural regeneration to increasing indigenous habitat	✓							BAU
			23) a) Develop indigenous planting procedures, including standards around local provenance, indigenous street trees and plant selection for major works, new development areas and biolinks, and processes for reintroduction of locally threatened or extinct plant species (e.g. Lara Grevillea, Button Wrinklewort) into suitable reserves. b) Review the *Indigenous Plants of the Geelong Region* guide to strengthen guidance on species diversity, reintroduction opportunities and priority habitats. c) Better support local indigenous nurseries to ensure the supply of plants of local provenance, including species required for restoration and reintroduction programs.	✓							BAU
			24) Select suitable indigenous street trees and plants for nature strips within approximately 200 metres either side of a biolink area.			✓		✓			BAU
			25) Prepare guidelines and standards for nature reserves and biodiversity outcomes in new development areas. This will include establishing urban biodiversity standards that address biodiversity sensitive urban design, minimum canopy and understorey diversity targets, habitat connectivity, and wildlife-friendly infrastructure (e.g. lighting and fencing), to support nature positive development outcomes.	✓		✓			✓	✓	BAU
			26) Identify and prioritise opportunities to enhance urban biodiversity and strengthen connections to nature in "nature-poor" suburbs, including the development of targets to guide implementation. This will focus on interventions such as pocket parks and urban greening within biolink areas to improve habitat connectivity and increase access to nature.					✓			Partnerships
			27) a) Investigate opportunities to provide artificial habitat infrastructure to support wildlife (for example, sprinklers for the Grey Headed Flying Fox Camp, wildlife road crossings, floating pontoons for water birds, old piles) b) Deliver two (2) habitat enhancement infrastructure projects.			✓		✓	✓	✓	Capital Projects
			28) Collaborate with Melbourne Water, Wyndam City and the community to explore future management of the Little River corridor.							✓	Partnerships
			29) **Identify high priority roadsides for nature conservation and increase management programs in these areas.	✓							BAU
			30) Review and expand the *Rabbit Action Plan* to include other pest animals such as foxes, deer and feral cats.	✓							BAU
			31) Update the City's Weed Prioritisation Tool (2017) to strengthen the identification and management of high-threat weeds, including clear priorities and actions for control.	✓							BAU
			32) **Develop and deliver community education and behaviour change initiatives to support responsible cat ownership, informed by research and examples from other municipalities.	✓							BAU
			33) a). Support the community to develop management and control measures for Indian Myna. This would include community education on monitoring and humane trapping measures. b). Investigate control opportunities for Indian Myna on priority City managed nature reserves.			✓		✓			Partnerships
			34) In high value wildlife areas managed by the City, continue to identify dogs-on-leash or dog exclusion zones through the *Domestic Animal Management Plan* 2026-29. This will maintain a strong focus on sustainable access management in response to population growth and increasing pressure on coastal and natural areas and may include provision of additional off-leash areas in new suburbs. Targeted education campaigns will support responsible dog ownership, including awareness of legal obligations and impacts on wildlife.			✓		✓			BAU

Goal	Strategic objectives (10 years)	Targets (10 years)	Actions (2 years)	Landscape							Resourcing
				Djiang	BaP	Bell	BwP	GC	LR	NU	
Foster stewardship and strong partnerships	• Broader and more diverse community participation in nature conservation across the City • Increasing biodiversity knowledge and awareness across the City and the wider community • Stronger and more effective partnerships are supporting and enhancing biodiversity outcomes across the City • Improved access to nature for people of all abilities across the City • Stronger collaboration across agencies, education providers, industry and community partners to deliver coordinated biodiversity outcomes.	• Increase the number of Geelong residents connected and engaged with nature • Increase participation in the Geelong Nature Festival and other community-based nature activities • Deliver a minimum of twenty (20) targeted activities per year to increase participation by culturally and linguistically diverse (CALD) communities in environmental education and nature related activities • Deliver a minimum of twenty (20) targeted activities per year to increase participation by young people in environmental education and nature related activities • Increase the number of Geelong residents volunteering in nature-related activities • Increase participation in citizen science programs • Establish baseline levels of community awareness and participation through surveys.	35) a) Prepare a community engagement, participation and awareness plan that provides a framework for connecting people to nature including programs for City staff **b) Increase understanding of the barriers experienced by minority groups (ability, age, ethnicity) to engage in nature conservation and identify opportunities to support their participation.	✓							BAU/Grant
			36) Continue to deliver the Geelong Nature Festival every two (2) years and nature week/month activities every alternate year.	✓							BAU
			37) Partner with two (2) City festivals and events to promote nature to a larger, more diverse community (for example Youth Festivals, Design Week).	✓							BAU
			38) Build community involvement in citizen science and monitoring programs to support the City's (6) key wildlife species and track trends in invertebrate populations. This will include strengthening the role of 'key' species to build community understanding and connection, through storytelling, education and practical guidance on how to create habitat and support their survival.	✓	✓	✓	✓	✓	✓	✓	Partnerships
			39) a) Continue to support and build capacity of the City's Caring for Nature volunteer groups and hold an annual event/activity b) Facilitate formation of two (2) new Caring For Nature Volunteer groups c) Increase the opportunities for people to volunteer for nature without needing to join a formal community group.	✓							BAU/Partner ships
			40) Engage urban residents in nature conservation through the Gardens for Wildlife program, nature strip plantings initiative and demonstration gardens, with priority given to properties within 200-metres of a biolink area and nature poor areas.			✓		✓			BAU/Partner ships
			41) **Establish a 'schools for wildlife' program and engage six (6) schools. This will support schools to create habitat on-site, connect with local biolinks projects, and access education and support to build student understanding and involvement in nature conservation.			✓		✓	✓		BAU/Partner ships
			42) Deliver the Nature Stewards course annually, prioritising participation of residents from 'nature-poor' suburbs.	✓							BAU
			43) **Develop a procedure to support corporate groups to fund and participate in nature-based volunteering.	✓							BAU
Build resilience to a changing climate	• Improved understanding of climate change impacts on natural areas, with adaptation and mitigation measures embedded in decision making • Increased protection and restoration of blue and teal carbon ecosystems across the City • Improved outcomes within the City open space reserves as the climate changes • Improved stormwater management to avoid and minimise negative impacts on the natural environment.	• Ensure climate change considerations are embedded across all relevant decision making processes • Increase the implementation of nature and eco-system-based solutions to minimise the negative impact of climate change on natural systems • Increase the extent of blue and/or teal carbon ecosystems protected and restored • Reduce impacts of stormwater on receiving environments and nature through the application of Integrated water management solutions and other stormwater management innovations in growth areas.	44) Develop and deliver targeted communication and education initiatives on the impacts of climate change on local biodiversity and key species, to build community understanding and support for conservation actions.	✓							BAU
			45) Improve catchment health and stormwater management to protect downstream ecosystems, including Port Phillip Bay, Corio Bay and Ramsar-listed wetlands. This will include prioritising restoration of Bellarine Peninsula waterways as biolink corridors, increasing investment in stormwater treatment (e.g. gross pollutant traps, nature-based systems and permeable materials), and protecting sensitive marine environments such as Swan Bay and Barwon Bluff Marine Sanctuary.			✓		✓	✓		BAU/ Capital Project/Grant /Partnership
			46) Develop guidelines to embed climate change considerations in strategic and statutory planning for natural areas, including recommendations for vegetation community migration zones. This will include establishing a methodology to assess adaptation needs of natural assets, and a process for regularly reviewing and updating these assessments over time in response to changing conditions.	✓							BAU
			47) a) Identify opportunities to protect and restore blue and teal carbon ecosystems within both City managed and private land b) Develop a proposal to access the blue carbon market, creating further incentives for protecting and restoring coastal environments through the *Tidal restoration of blue carbon ecosystems method* c) Deliver one (1) blue carbon restoration project.			✓		✓	✓		BAU/ Capital Project/Grant /Partnership
			48) a) Identify suitable locations to restore intertidal and marine environments using nature-based solutions such as living seawalls, reefs and piles, and seagrass and mangrove restoration b) Deliver two (2) marine restoration projects.			✓		✓	✓		Capital Project/Grant
			49) Implement integrated water management solutions alongside innovative stormwater management approaches to reduce impact on natural saline ecosystems, including Sparrovale Wetlands Reserve - *Ngubitj yoorree*, Moonahwarri, Point Richards Flora and Fauna Reserve and Portarlington Recreation Reserve, Limeburners Bay and Avalon. This includes nature-based solutions and techniques such as stormwater offsets, permeable surfaces, water-sensitive urban design, green infrastructure, and catchment-scale measures to slow, treat and reuse runoff before it reaches sensitive environments.			✓		✓			Partnership/ Grants/BAU

RESTORING OUR NATURAL AREAS
Environmental work is underway in this reserve.
We are working with our community to protect, restore and maintain our biodiversity and natural habitats.
GEELONG

Implementation and renewal

Successful governance and implementation of the Plan rely on coordinated long-term and annual monitoring, supported by regular evaluation to ensure actions can be refined, better targeted and continually improved over time.

The City is committed to maintaining a robust monitoring, evaluation, reporting and improvement (MERI) framework to guide delivery and track progress.

IMPLEMENTATION FRAMEWORK

A strengthened implementation framework will underpin delivery of the Plan (Figure 22). This will include:

- Clear timelines for actions and milestones
- Defined responsibilities across relevant City departments
- Measurable performance indicators
- Public reporting requirements to ensure transparency and accountability
- Defined processes to address underperformance or non-delivery

Further detail will be provided through supporting implementation documentation.

IMPLEMENTATION PLANNING AND RESOURCING

The City commits to preparing and maintaining a detailed implementation arrangements to support delivery of this Plan. This will include:

- Short-term (two-year) action planning, updated on a rolling basis
- Longer-term (10-year) resourcing and delivery priorities
- Clear funding pathways and investment priorities
- Identification of internal and external delivery partners

Opportunities will also be explored to strengthen funding, including:

- Corporate sponsorship, government funding initiatives and partnerships
- Engagement with philanthropic trusts and individual donors
- Potential establishment of dedicated fundraising mechanisms or entities to support ongoing investment in nature.

REVIEW AND RENEWAL

The shorter-term Action Plan will be reviewed and updated every two years on a rolling basis to ensure it remains responsive and effective. The broader Plan will undergo a major review every 10 years.

Progress towards the Plan's strategic outcomes will be evaluated at the end of the Plan's life in 2036, informing the next iteration of the Plan.

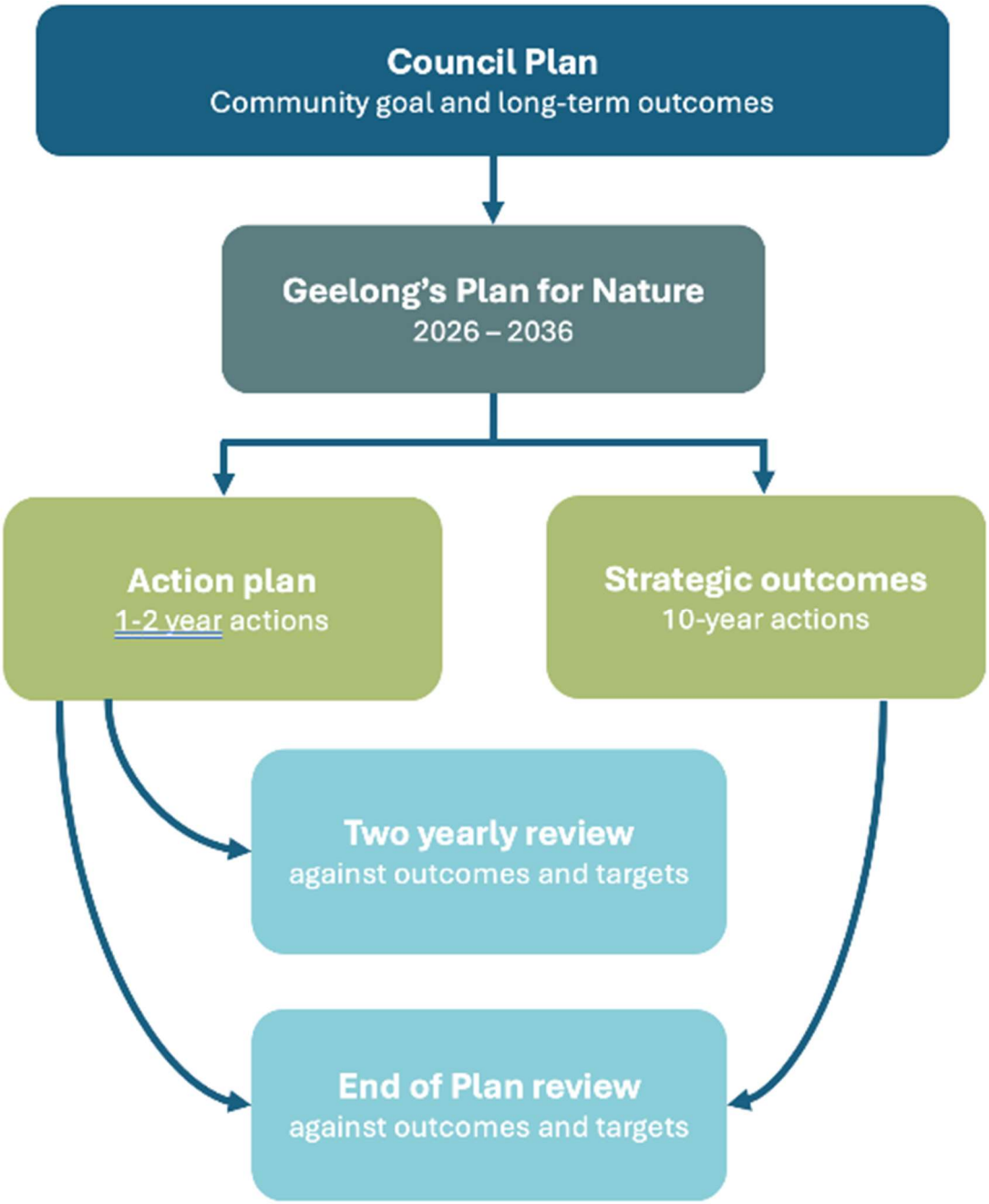


Figure 22. Plan and timing for implementation and review

Monitoring and evaluation

The City is committed to ongoing monitoring, reporting, evaluation and improvement (MERI) used the latest best practices and technologies. These processes formalise the collection of insights gained through implementing the Plan. They also support adaptive management and continuous improvement by ensuring that lessons are used to inform future actions.

A key focus for evaluating the Plan's success will be tracking progress against the targets set under each of the five goals and across each of the six landscapes.

The Plan aligns with international best practice by incorporating clear targets, measurable outcomes, regular monitoring and reporting, and an adaptive management approach, while contributing to global commitments such as the '30 by 30' conservation target.

Table 6. Monitoring requirements

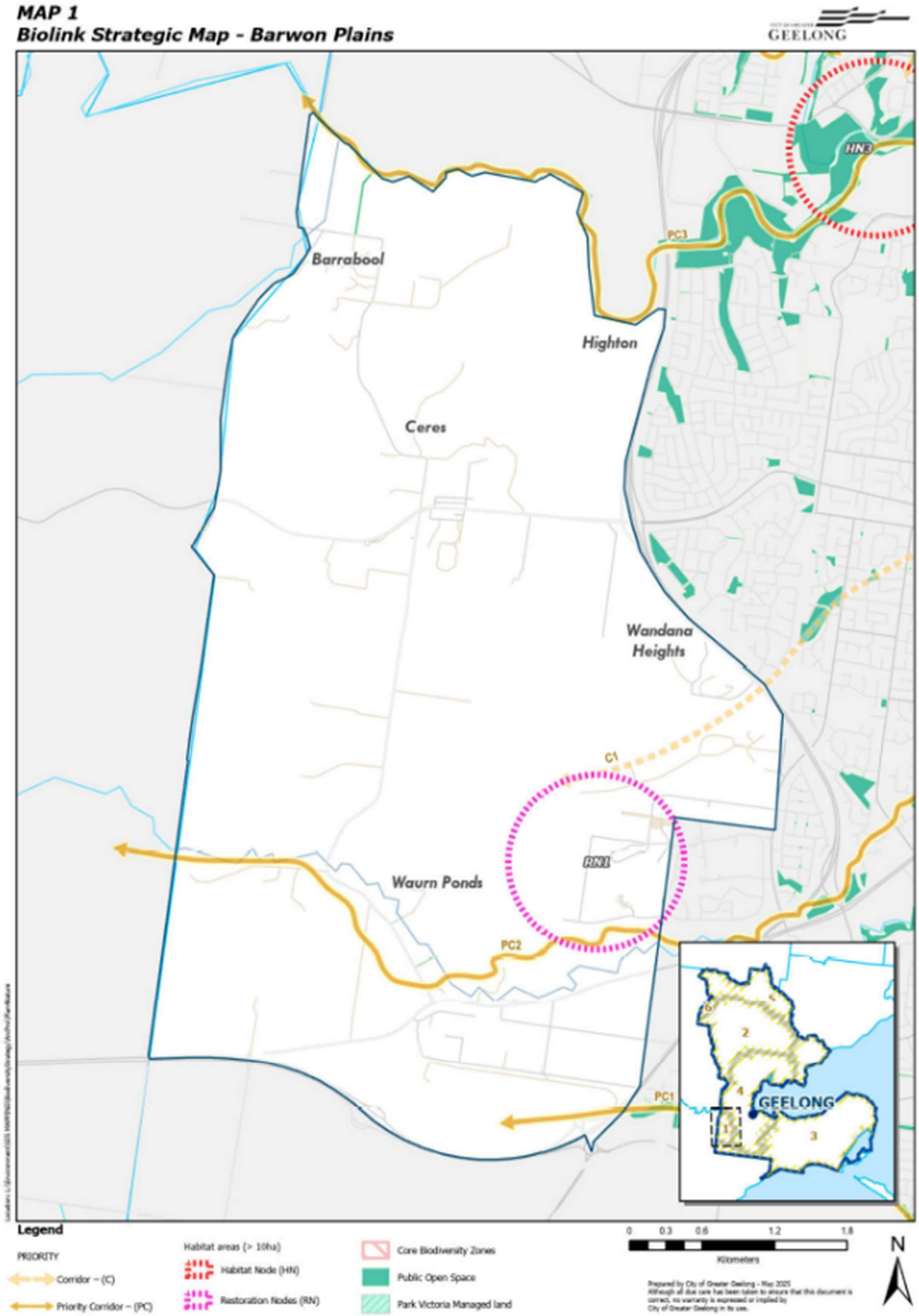
WHAT NEEDS MONITORING	BASELINE EXISTS	WHEN?
The extent and variety of protected natural habitat.	• Nature Reserves – 1358 hectares • Conservation Estate - 9.7% • City Biodiversity Mapping 2024 • Protection Measures (as per mapping 2026).	Biennial (every two-years)
Habitat quality and condition of nature reserves.	Sparrovale Wetlands Reserve - *Ngubitj yoorree*, Old Melbourne Road Grassland Buckley Park Foreshore reserve.	Five yearly
Status of conservation management plans for threatened species.	Hooded Plover Conservation Action Plan Latham's Snipe Plan	Five yearly
Connectiveness of priority corridors.	TBD.	
Extent of blue and/or teal carbon habitat that is protected.	• Southeast Bellarine Biolink Blue carbon mapping • Swan Bay Incentive Program • The Point Blue Carbon Mapping • Shell Foreshore Mapping • City Biodiversity Mapping 2024 • Corangamite CMA Mapping.	Five yearly
Geelong residents' engagement with nature.	• 80 Caring for Nature Groups • Attendance at Geelong Nature Festival (no.) • Attendance at other nature events (no.) • Nature Stewards Alumni (no.)	Biennial (every two-years)
No. of nature reserves where language, stories or cultural practice is established.	Number of nature reserves where language, stories and cultural practice exist.	Five yearly

The evaluation of the success of the Plan will also be guided by the following themes and key evaluation questions (KEQs).

Table 7. Themes and Key Evaluation Questions

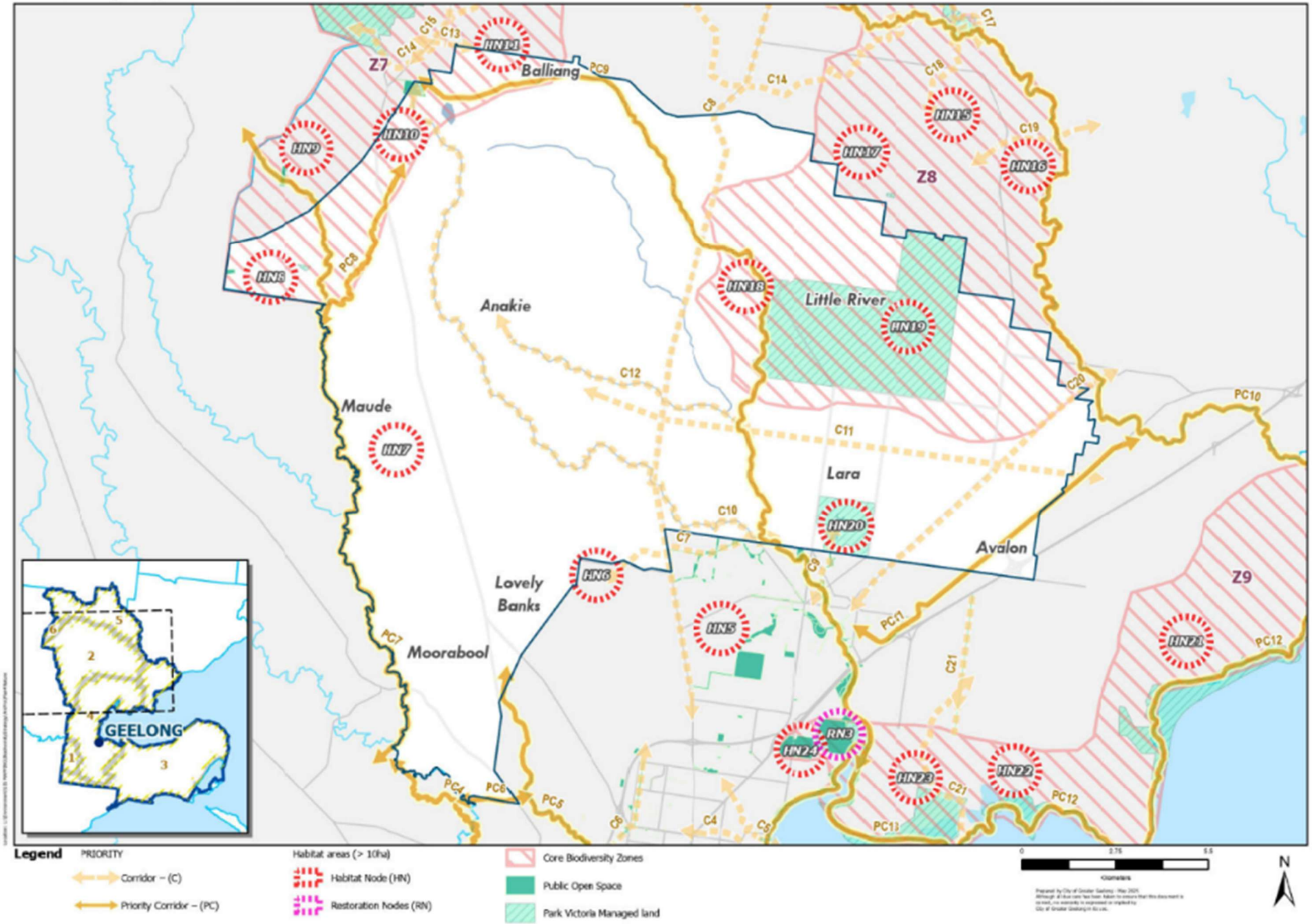
THEMES	KEY EVALUATION QUESTIONS (KEQs)
Plan design Focuses on whether the governance and actions were appropriately designed to deliver the intended targets (and goals)	Was the design of the Plan appropriate to deliver the intended outcomes?
Plan implementation Focuses on whether the actions of the Plan were delivered as planned and seeks to identify how these approaches have ensured efficient and cost-effective delivery.	To what extent have the Plan actions been delivered as planned?
	To what extent was the delivery good value for money?
Plan impact Focuses on what the Plan has achieved to date against the intended targets (and goals). At the end of the Plan term, the focus is also on the legacy of the program and to what extent the impact of the actions will extend beyond the life of the Plan (long-term outcomes).	To what extent did the actions lead to the achievement of the targets?
	What impact will the actions have beyond the life of the Plan?

MAPS 1-6: Environment Values



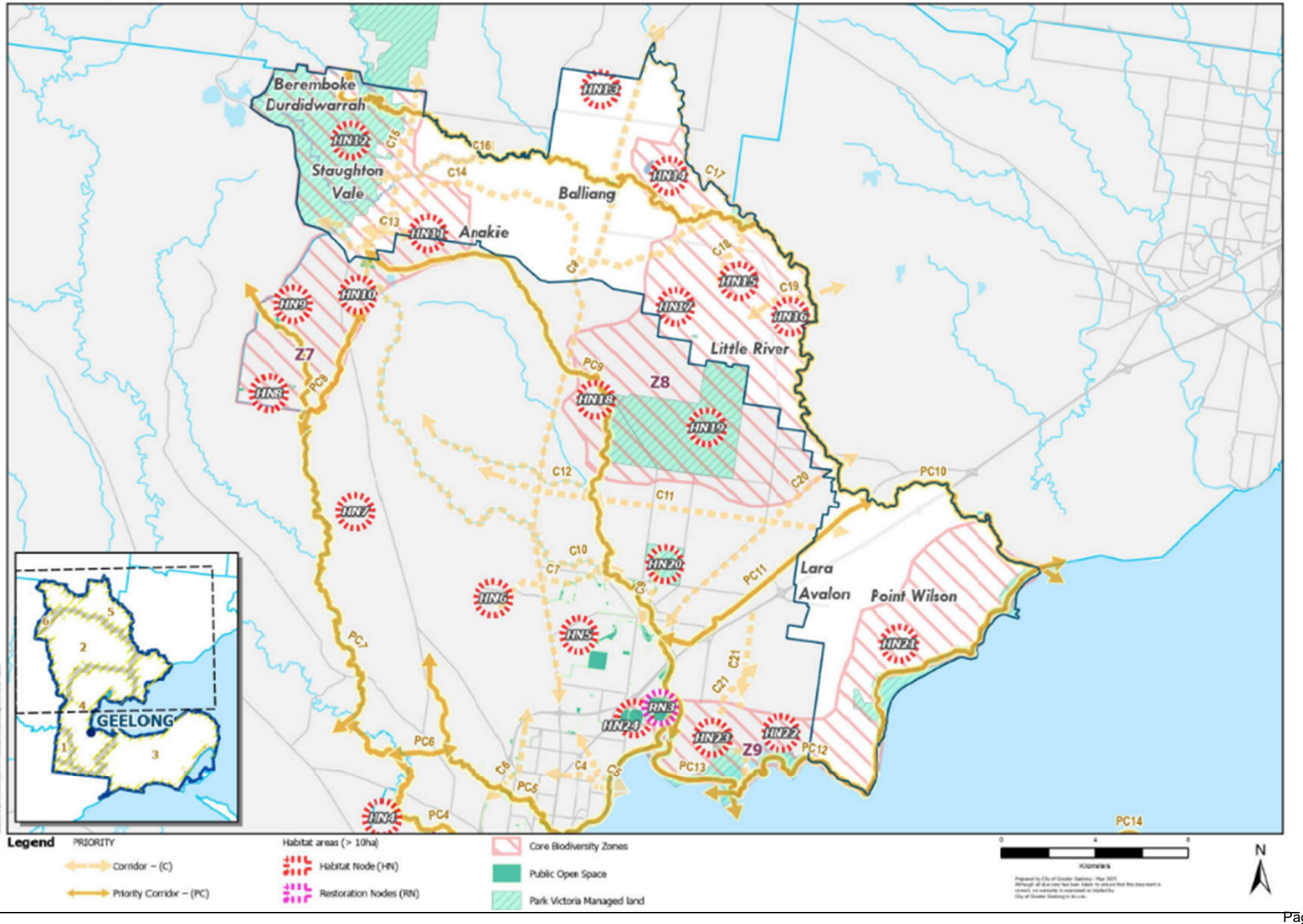
MAP 2
Biolink Strategic Map - Bellarine

MAP 3
Biolink Strategic Map - Basalt Plains

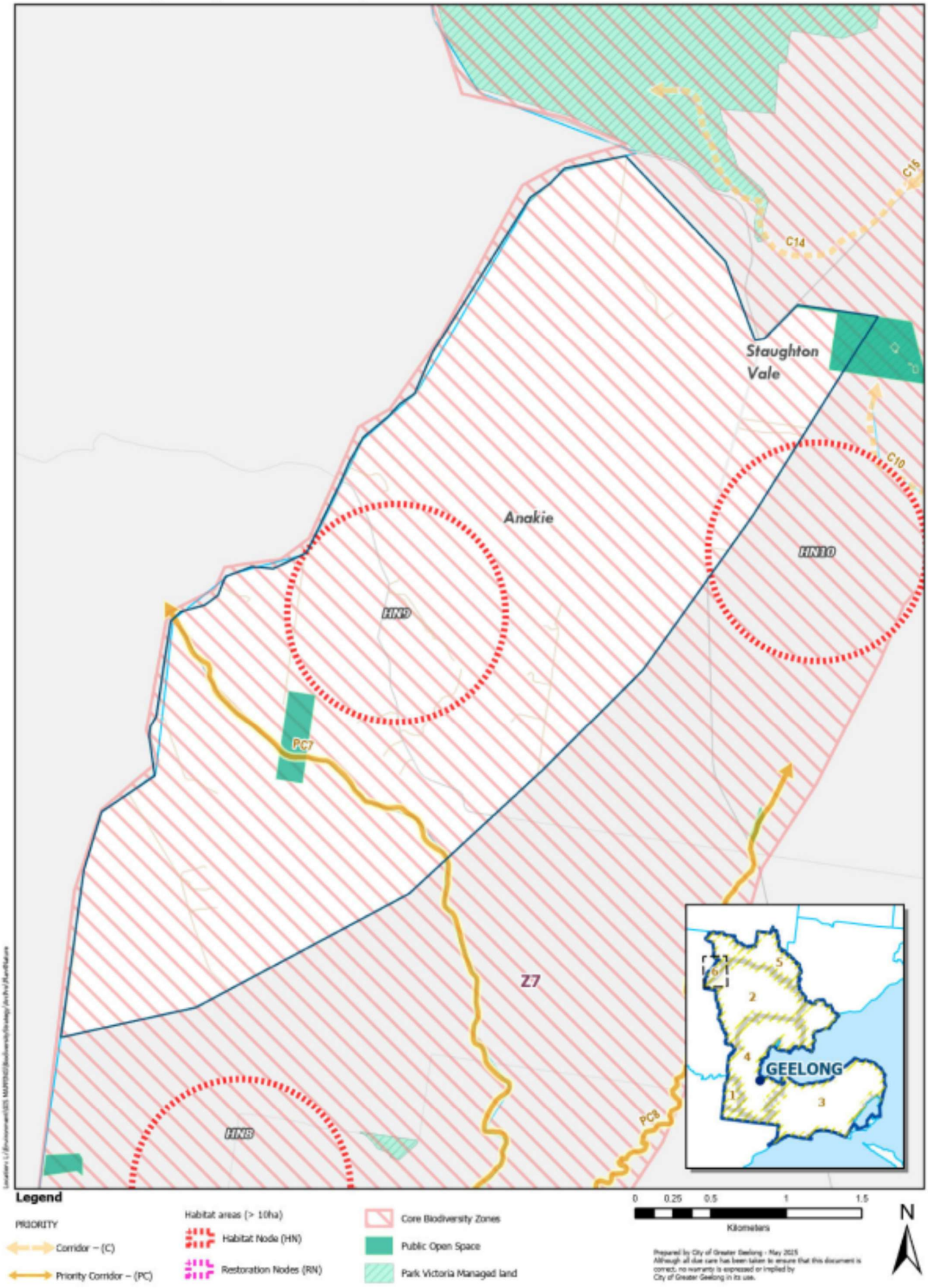


MAP 4
Biolink Strategic Map - Geelong City

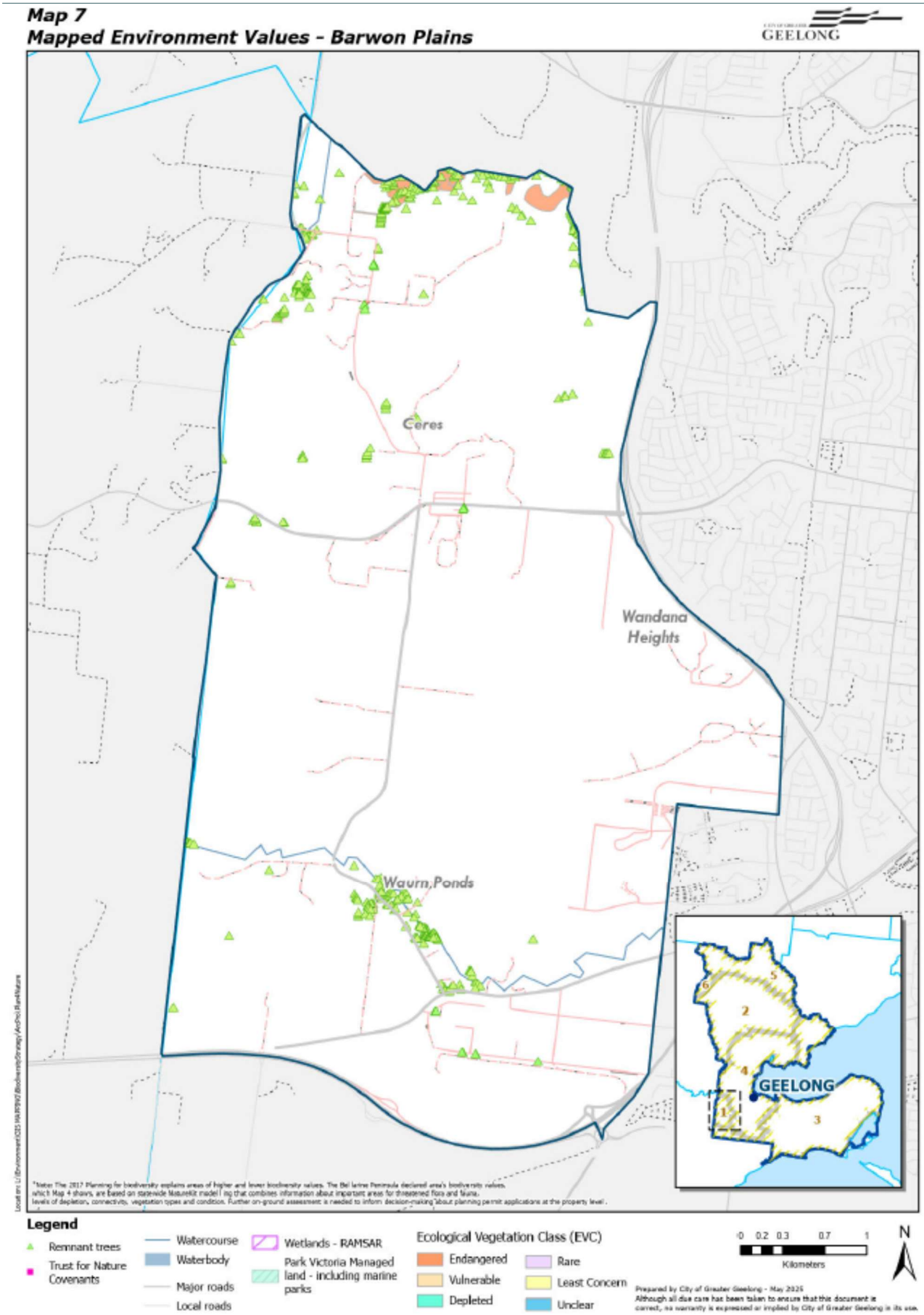
MAP 5
Biolink Strategic Map - Little River



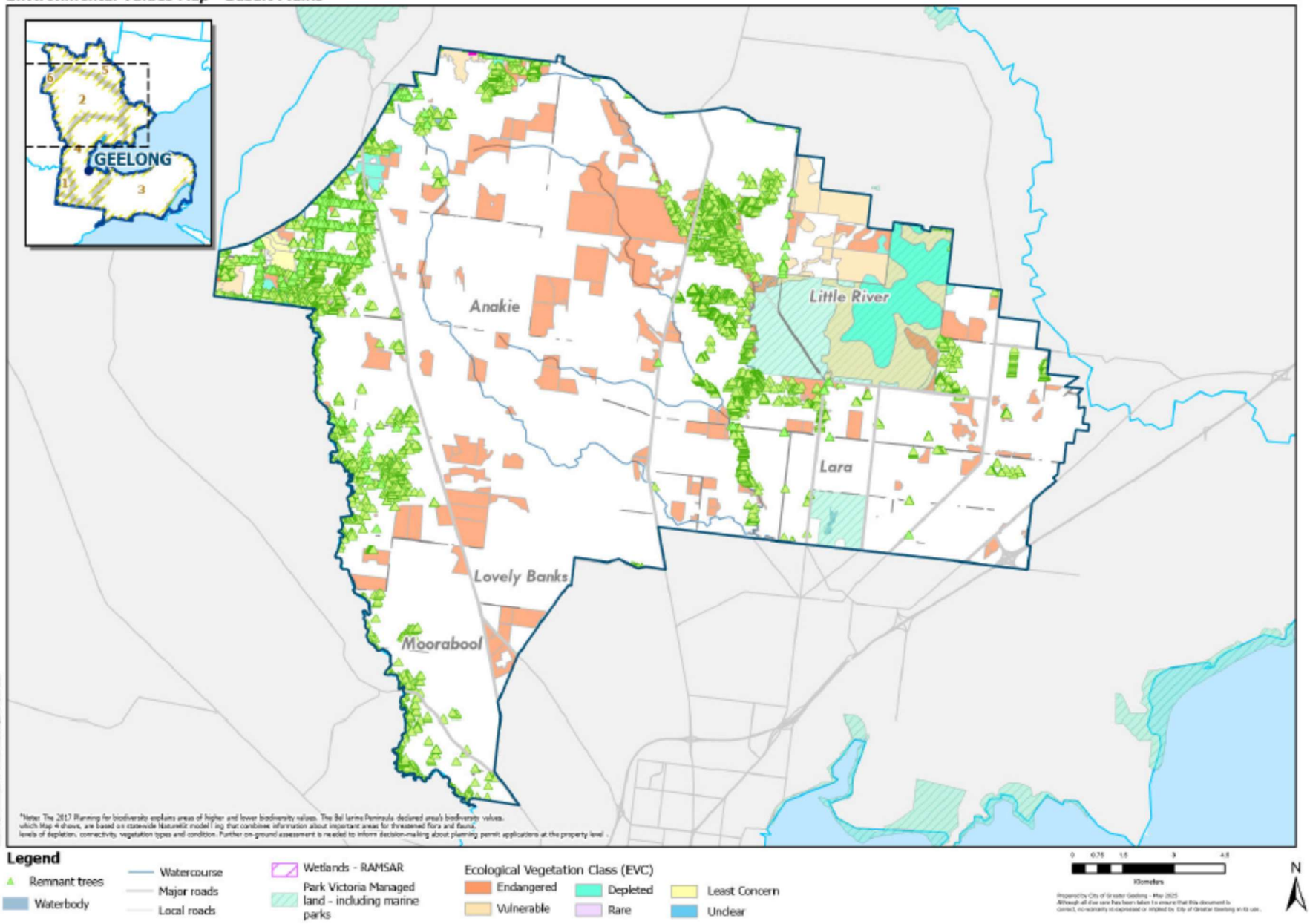
MAP 6
Biolink Strategic Map - Northern Uplands



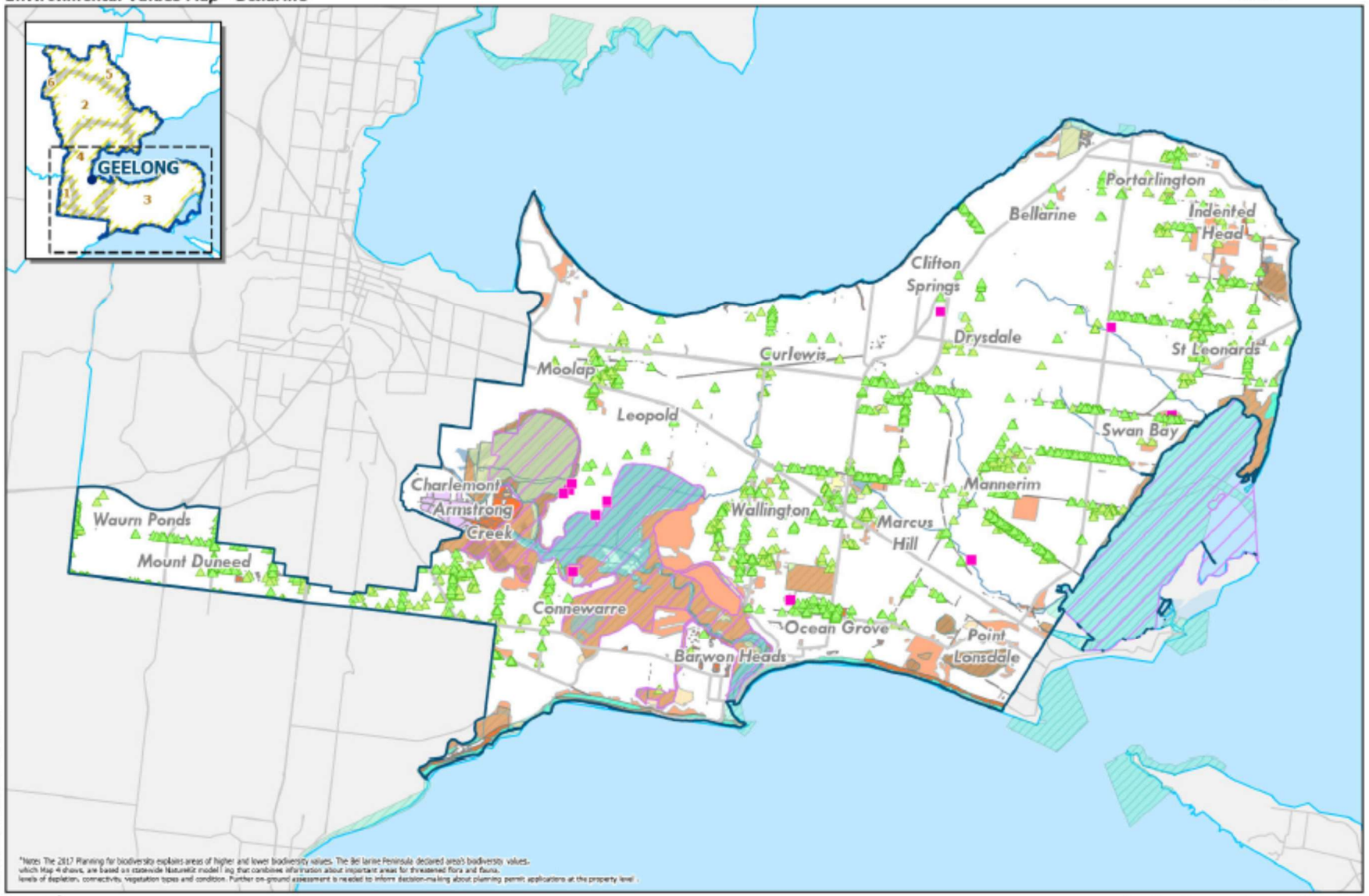
MAPS 7-12: Environmental Values



Map 8
Environmental Values Map - Basalt Plains



Map 9
Environmental Values Map - Bellarine



*Notes: The 2017 Planning for biodiversity explores areas of higher and lower biodiversity values. The Bellarine Peninsula declared area's biodiversity values, which Map 4 shows, are based on statewide NatureMiz modelling that combines information about important areas for threatened flora and fauna, levels of depletion, connectivity, vegetation types and condition. Further on-ground assessment is needed to inform decision-making about planning permit applications at the property level.

Legend

- Remnant trees
- Waterbody
- Watercourse
- Major roads
- Local roads
- Wetlands - RAMSAR
- Park Victoria Managed land - including marine parks

Ecological Vegetation Class (EVC)

- Endangered
- Vulnerable
- Depleted
- Rare
- Least Concern
- Unclear

0 1 2 4 6 Kilometres

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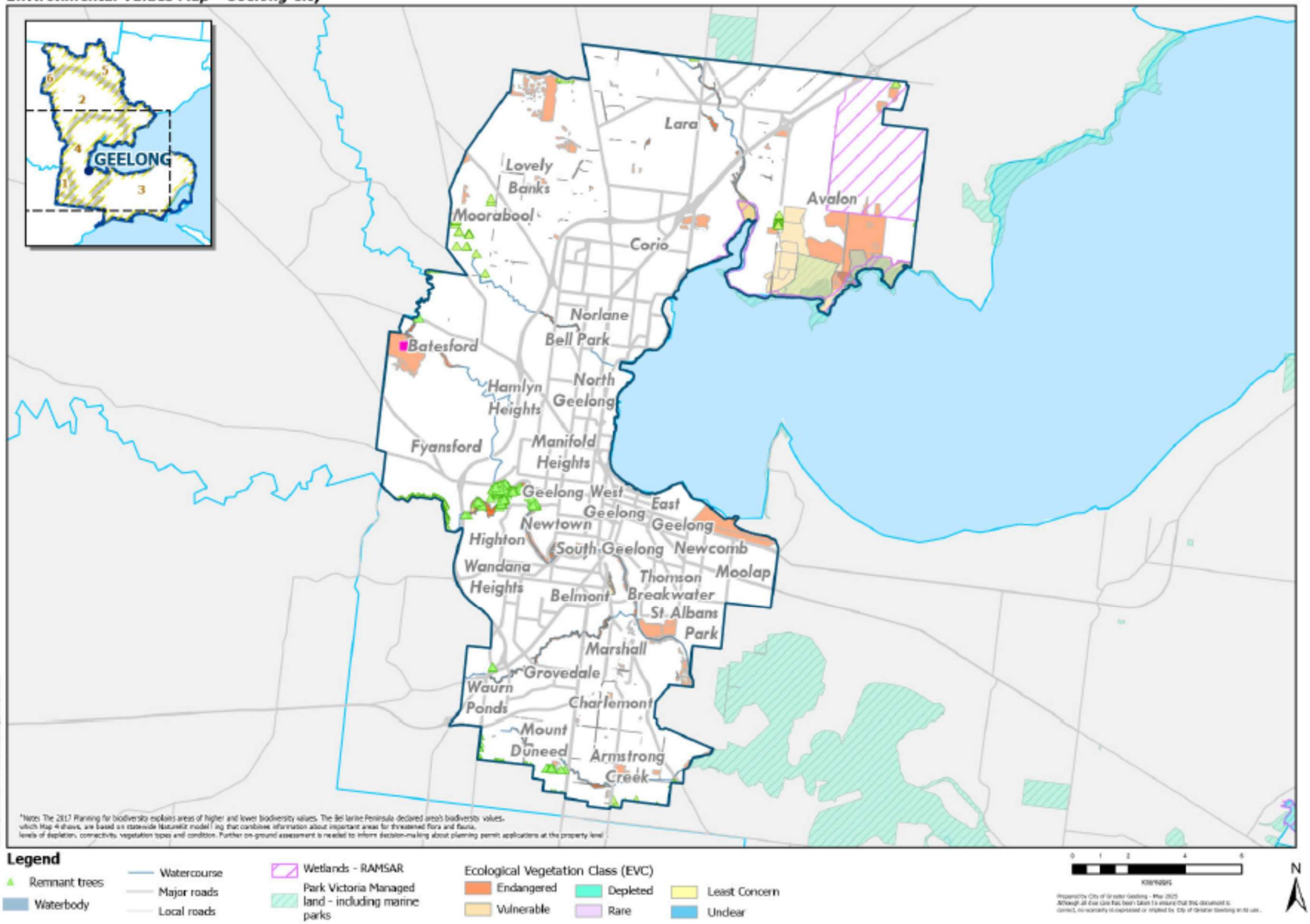
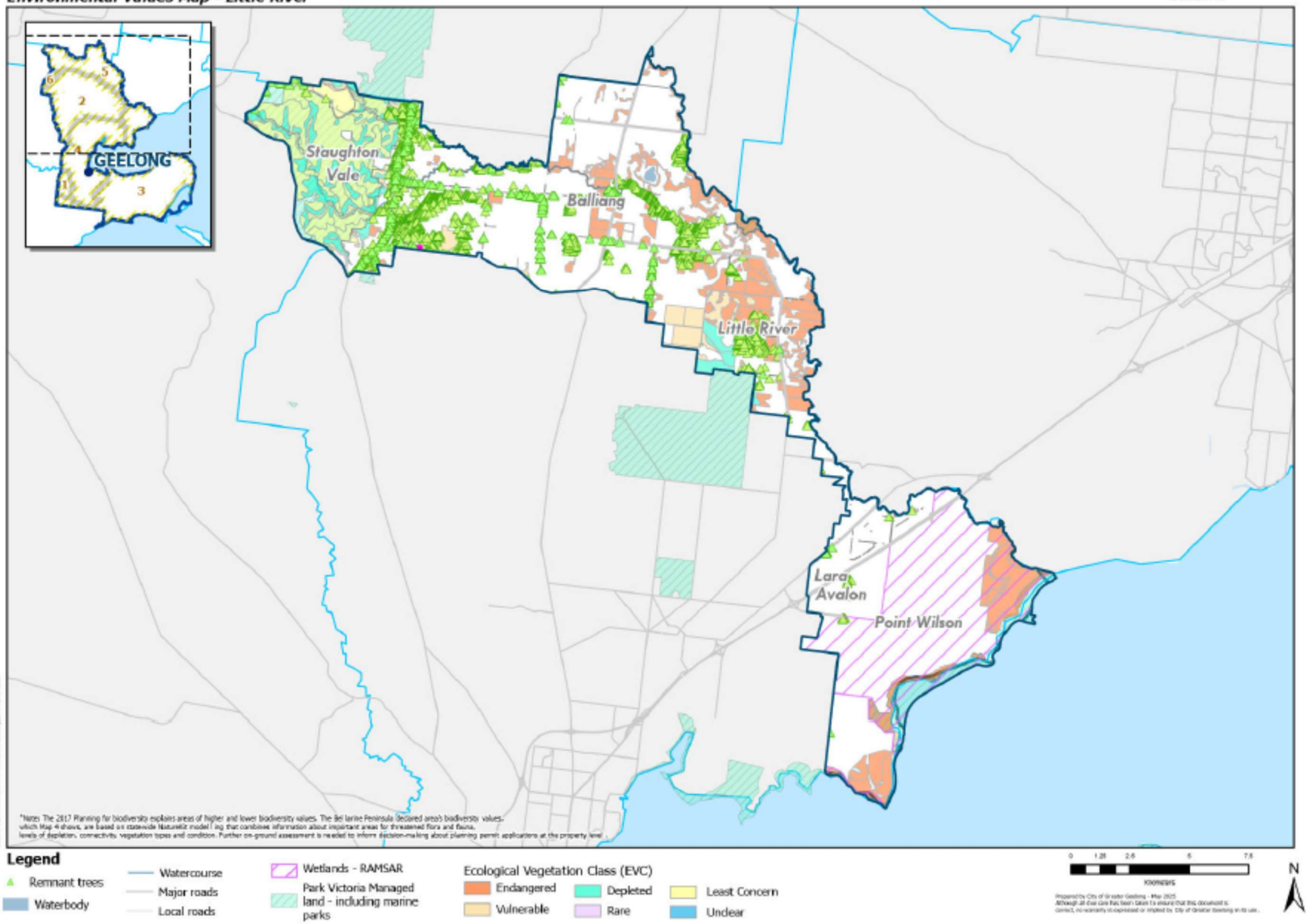
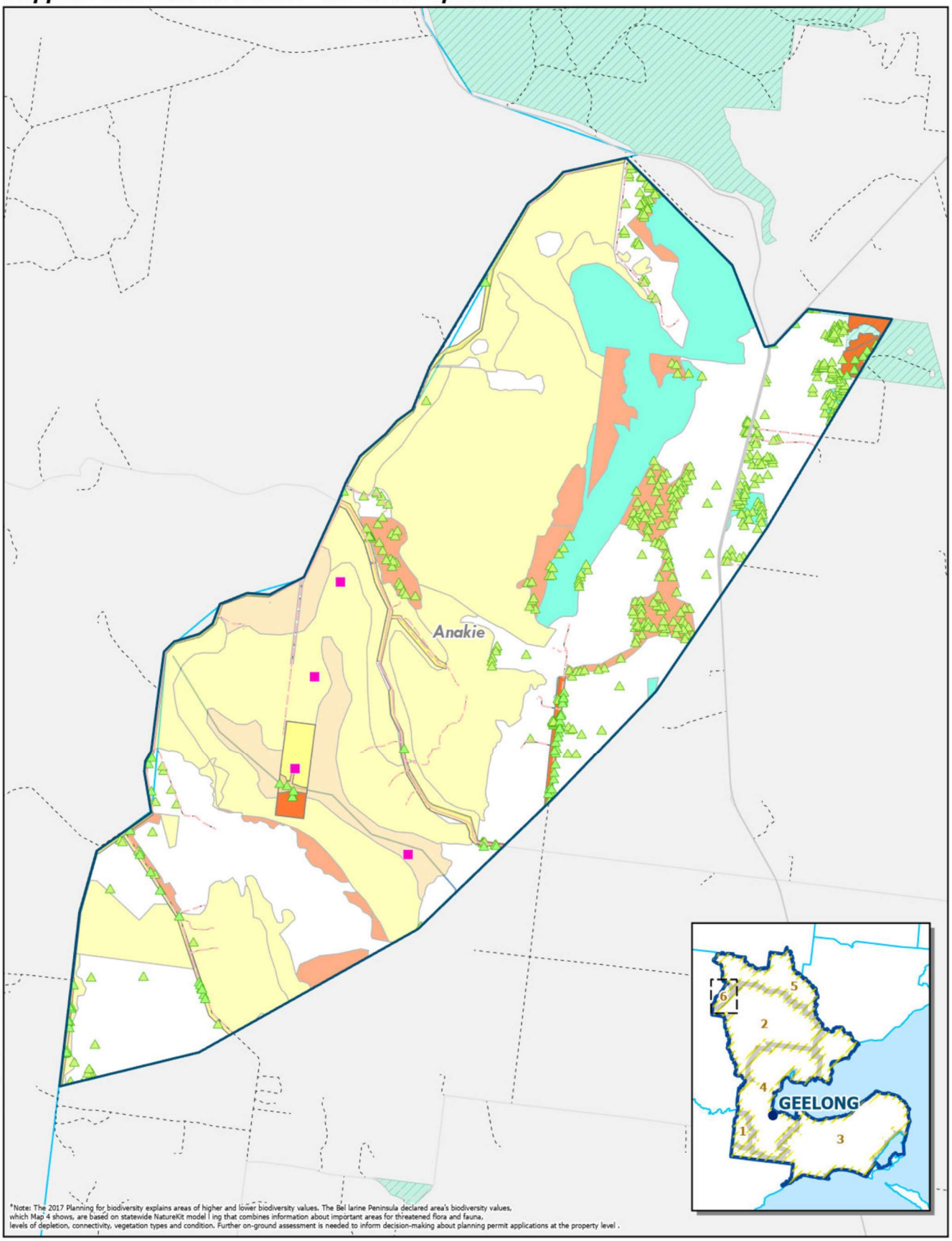
Map 10
Environmental Values Map - Geelong City



Map 11
Environmental Values Map - Little River



Map 12
Mapped Environment Values - Northern Uplands



*Note: The 2017 Planning for biodiversity explains areas of higher and lower biodiversity values. The Bel larine Peninsula declared area's biodiversity values, which Map 4 shows, are based on statewide NatureKit model l ing that combines information about important areas for threatened flora and fauna, levels of depletion, connectivity, vegetation types and condition. Further on-ground assessment is needed to inform decision-making about planning permit applications at the property level .

Location: L:\Environment\GIS MAPPING\BiodiversityStrategy\ArcPro\PlanNature

Legend

- Remnant trees
- Trust for Nature Covenants
- Watercourse
- Waterbody
- Major roads
- Local roads
- Wetlands - RAMSAR
- Park Victoria Managed land - including marine parks

Ecological Vegetation Class (EVC)

- Endangered
- Vulnerable
- Depleted
- Rare
- Least Concern
- Unclear

0 0.1 0.3 0.5 0.8
Kilometers

N

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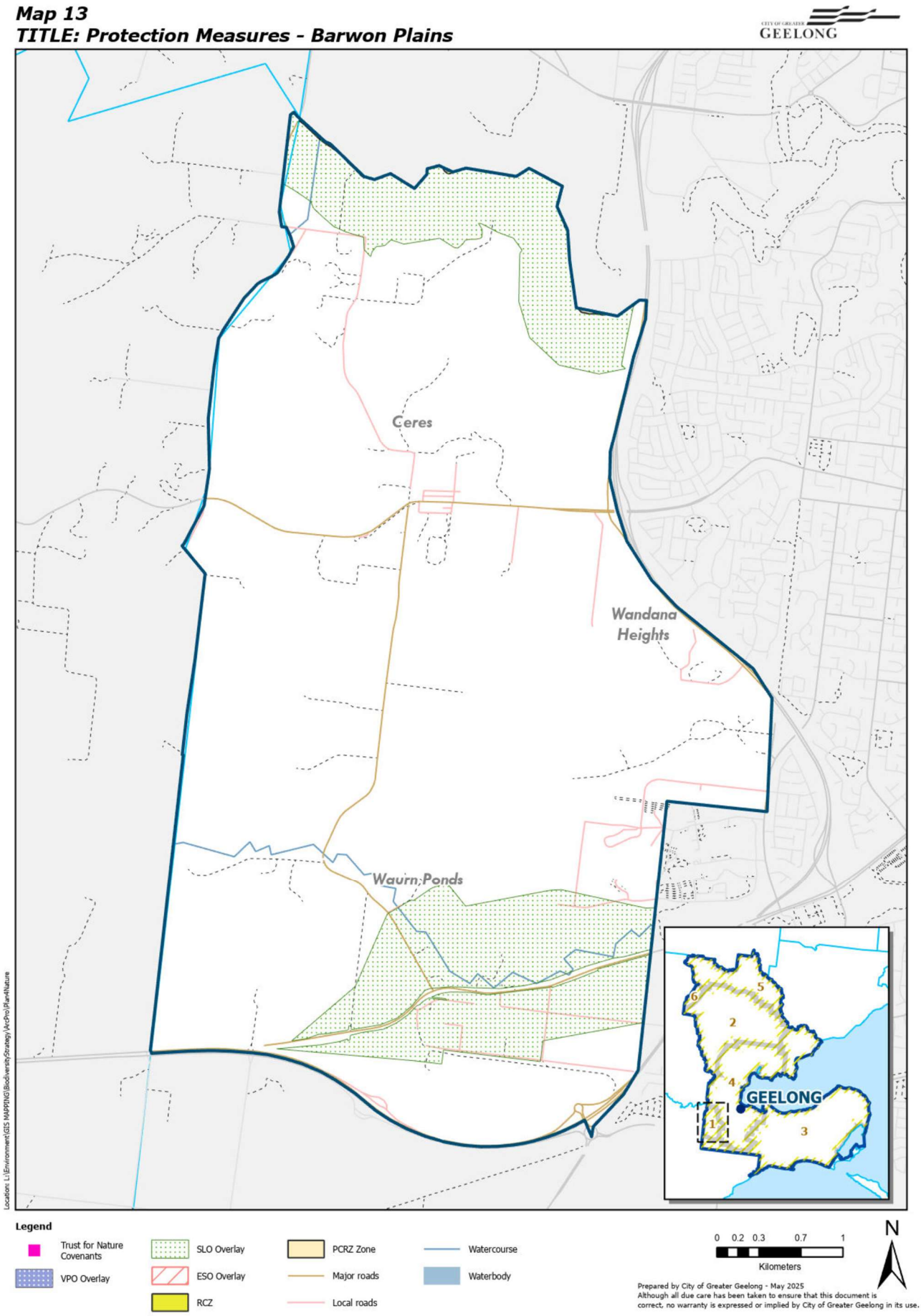
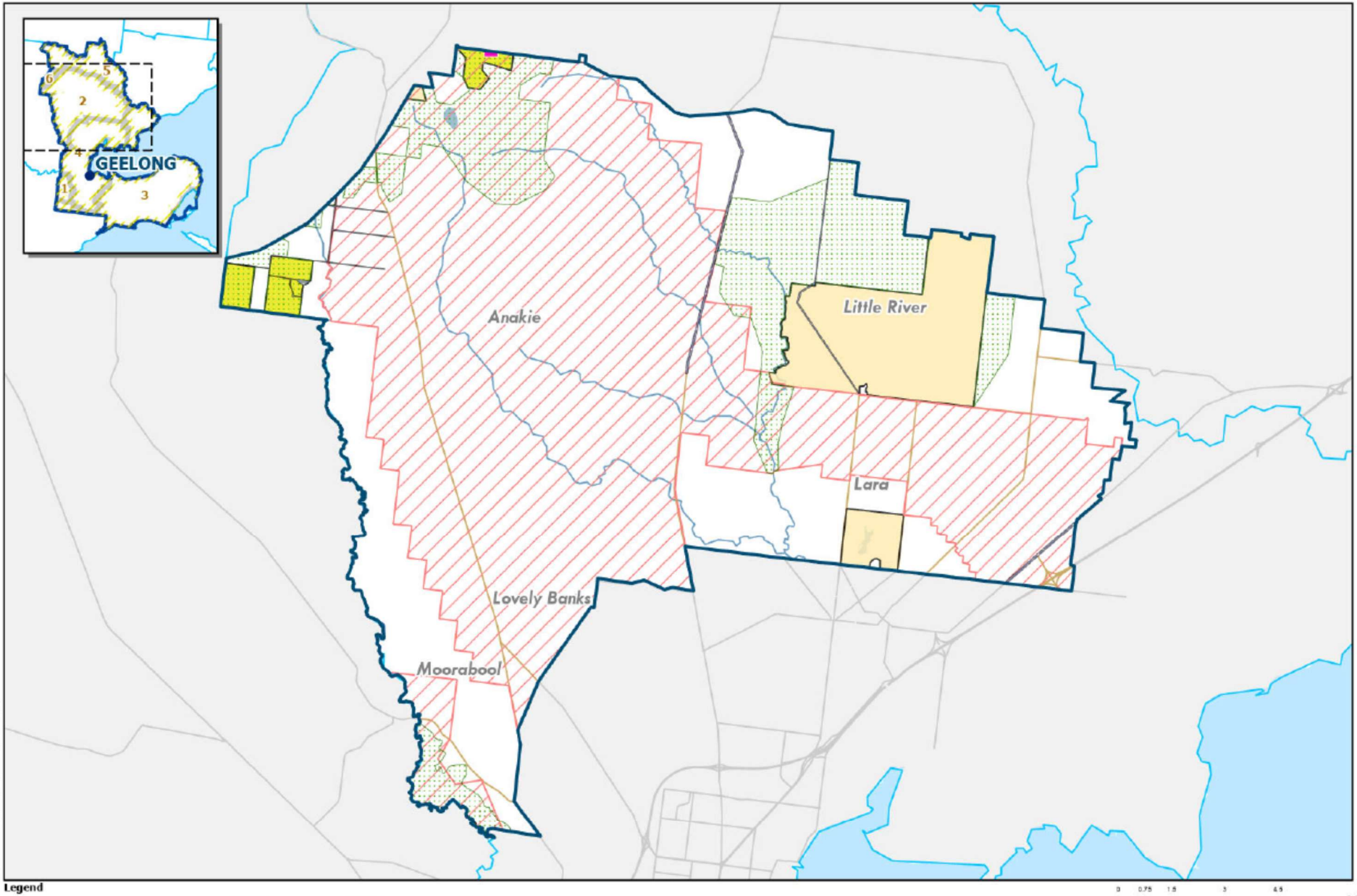
MAPS 13-18: Protection Measures



Map 14
Protection Measures - Basalt Plains



Legend

- Trust for Nature Covenants
- VPO Overlay
- SLO Overlay
- ESO Overlay
- RCZ
- PCRZ Zone
- Major roads
- Watercourse
- Waterbody

0 0.75 1.5 3 4.5
Kilometers

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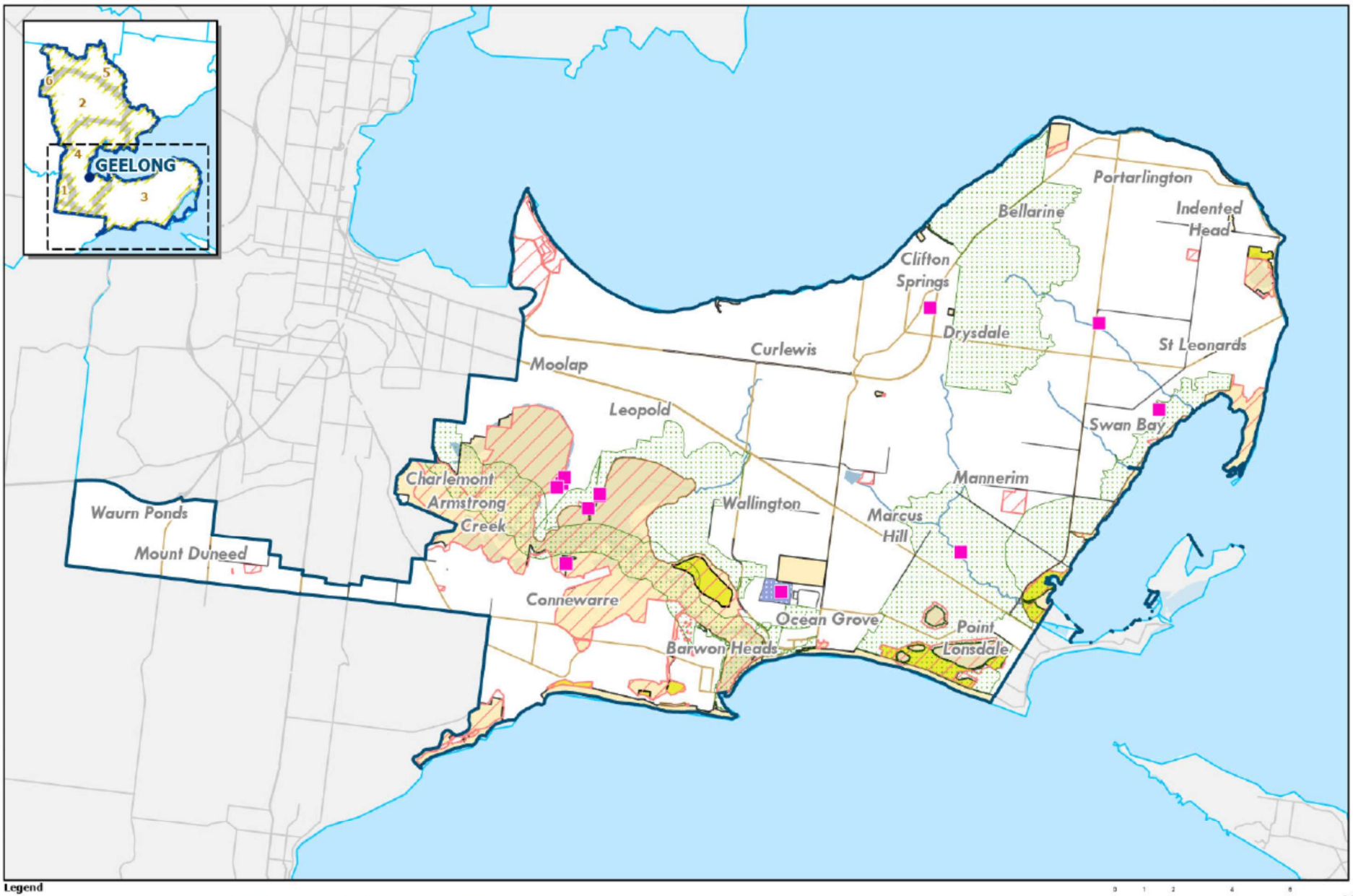
Map 15
Protection Measures - Bellarine



Legend

- Trust for Nature Covenants
- VPO Overlay
- SLO Overlay
- ESO Overlay
- RCZ
- PCRZ Zone
- Major roads
- Watercourse
- Waterbody

0 1 2 4 6
Kilometers

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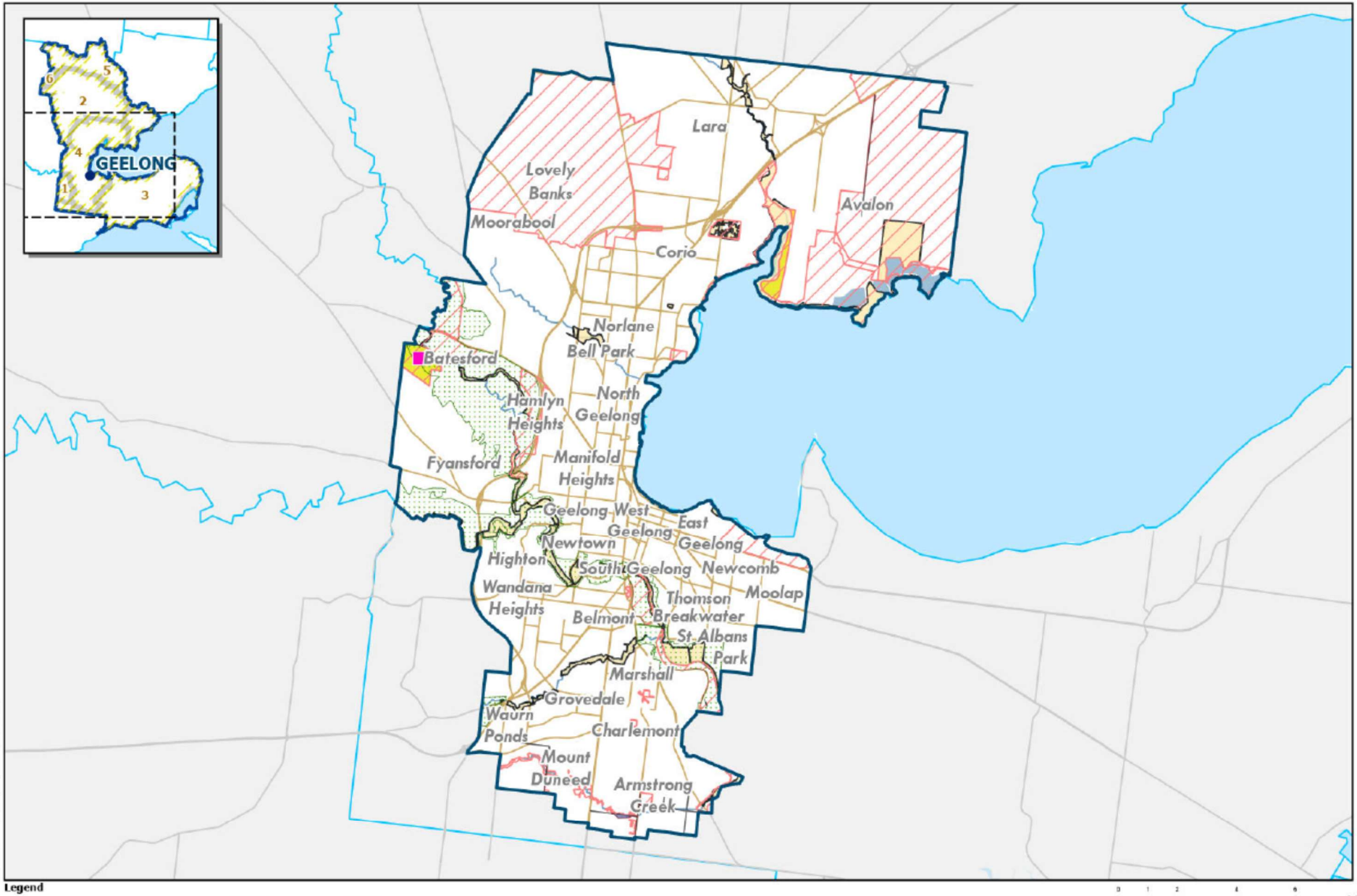
Map 16
Protection Measures - Geelong City



Legend

- Trust for Nature Covenants
- VPO Overlay
- SLO Overlay
- ESO Overlay
- RCZ
- PCRZ Zone
- Major roads
- Watercourse
- Waterbody

0 1 2 4 6
Kilometers

N

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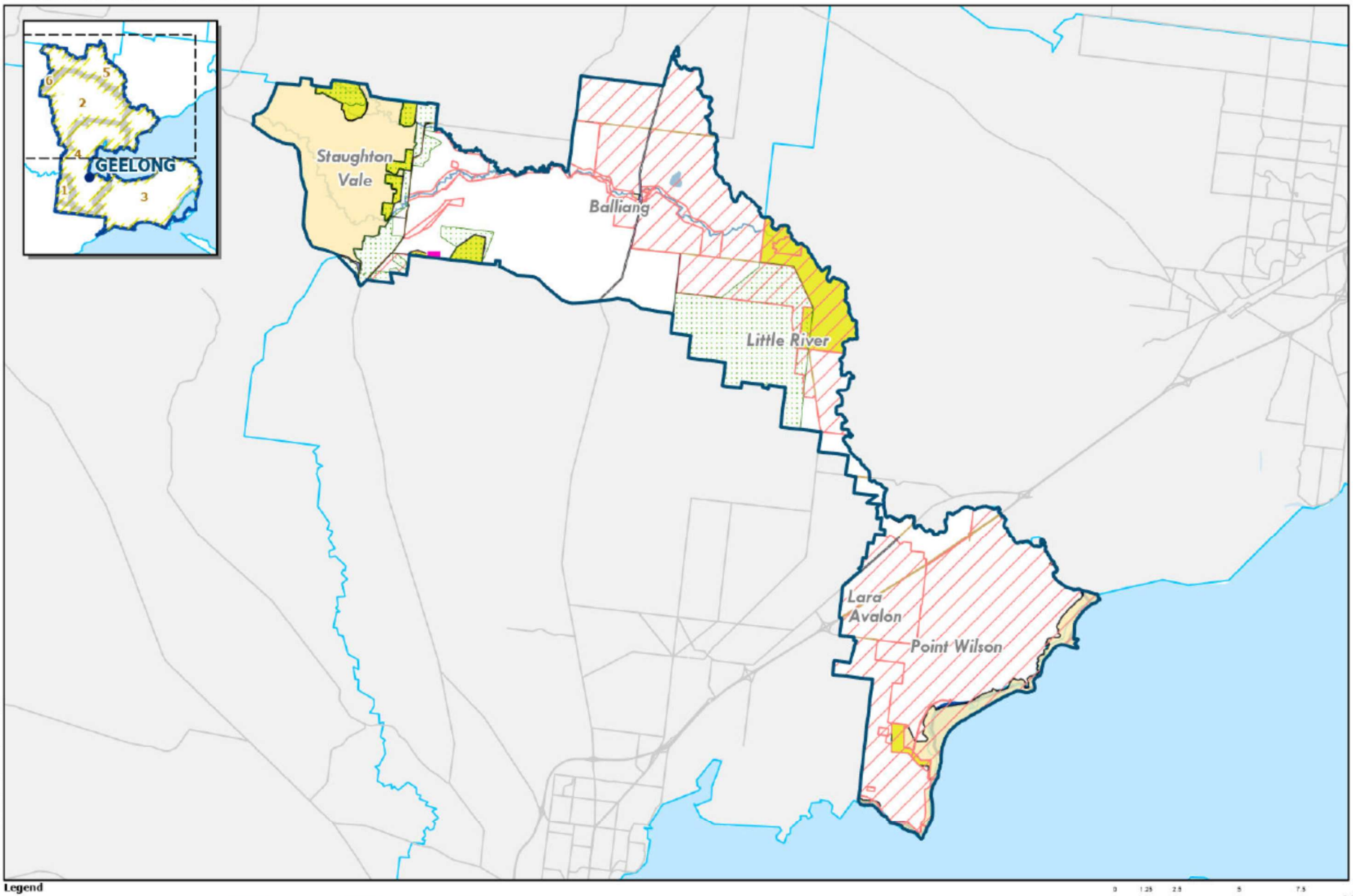
Map 17
Protection Measures - Little River



Legend

- Trust for Nature Covenants
- VPO Overlay
- SLO Overlay
- ESO Overlay
- RCZ
- PCRZ Zone
- Major roads
- Watercourse
- Waterbody

0 1.25 2.5 5 7.5
Kilometers

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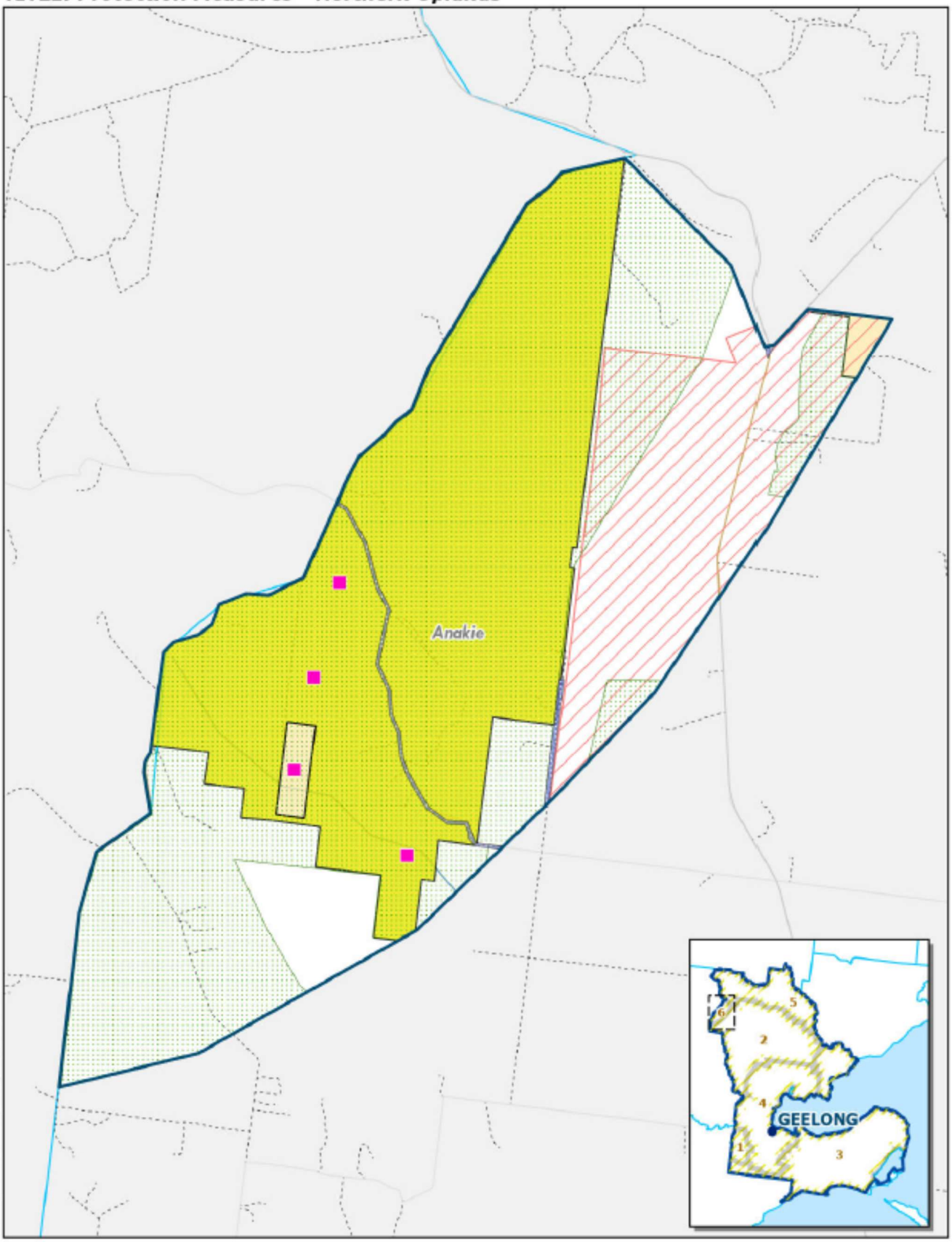
Map 18
TITLE: Protection Measures - Northern Uplands



Legend

- Trust for Nature Covenants
- VPO Overlay
- SLO Overlay
- ESO Overlay
- RCZ
- PCRZ Zone
- Major roads
- Local roads
- Watercourse
- Waterbody

0 0.1 0.3 0.5 0.8
Kilometers

N

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Appendix 1: Threatened Species and Ecological Communities Summary

TAXONOMIC GROUP	THREATENED TOTAL	EPBC LISTED	EPBC SPECIES AND CATEGORY OF THREAT	CR EN	CE SPECIES
Mammals	9	2	Grey Headed Flying Fox (V) Southern Brown Bandicoot (E)	0	
Birds	62	14	Australian Bittern (E) Gang-gang Cockatoo (E) Hooded Plover (V) Latham's Snipe (V) Lesser Sand Plover (E) Painted Honeyeater (V) Red Knot (V) Sharp-tailed Sandpiper (V) Shy Albatross (E)	5	Eastern Curlew Great Knot Orange-bellied Parrot Plains Wanderer Swift Parrot
Reptiles	4	3	Stripped Legless Lizard (V) Glossy Grass Skink (V)	1	Grassland Earless Dragon
Amphibians	2	1	Growling Grass Frog (V)	0	
Fish	5	2	Australian Grayling (E) Yarra Pygmy Perch (V)	0	
Invertebrates	9	1	Golden Sun Moth (V)	0	
Plants	91	14	Clover Glycine (V) Spiny Peppercress (V) Swamp Everlasting (V) Small Golden Moths (E) Fragrant Leek-orchid (E) Dense Leek-orchid (V) Ornate Pink-fingers (V) Matted Flax Lily (E) White Sunray (E) Button Wrinkle Wort (E) Large-headed Fireweed (V) Adamson's Blown-grass (E) Purple Eyebright (E)	1	Spiny Rice-flower
Ecological Communities	10	6	Subtropical and Temperate Coastal Saltmarsh (V) Grey Box (Eucalyptus microcarpa) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia (E)	4	Natural Temperate Grasslands of the VVP Grassy Eucalypt Woodland of the VVP Seasonal Herbaceous Wetland of the Temperate Lowland Plains Natural Damp Grasslands of the Victorian Coastal Plain
Total	**192**	**43**		**11**	

Appendix 2: Threatened Species and Ecological Communities

Taxonomic Group	Common Name	Scientific Name	EPBC - Category of Threat	FFG - Category of Threat	Habitat on City Managed Land	Barwon Plain	Basalt Plains	Cities Geelong	Bellarine	Northern Uplands	Little River
mammal	Brush-tailed Phascogale	*Phascogale tapoatafa*		V						yes	yes
mammal	Burrunan Dolphin	*Tursiops australis*		CE				yes	yes		yes
mammal	Common Bent-wing Bat	*Miniopterus schreibersii*		CE							
mammal	Common Dunnart	*Sminthopsis murina*		V							
mammal	Fat-tailed Dunnart	*Sminthopsis crassicaudata*		V			yes				yes
mammal	Grey-headed Flying-fox	*Pteropus poliocephalus*	V	V	yes	yes	yes	yes	yes		yes
mammal	Platypus	*Ornithorhynchus anatinus*		V				yes			
mammal	Southern Brown Bandicoot	*Isoodon obesulus obesulus*	E	E			yes	yes	yes		yes
mammal	Southern Right Whale	*Eubalaena australis*		E					yes		
bird	Australasian Bittern	*Botaurus poiciloptilus*	E	CE	yes		yes	yes	yes		yes
bird	Australian Little Bittern	*Ixobrychus dubius*		E					yes		
bird	Australian Painted Snipe	*Rostratula benghalensis*		CE					yes		
bird	Australasian Shoveler	*Anas rhynchotis*		V					yes		
bird	Barking Owl	*Ninox connivens*		CE						yes	yes
bird	Black Falcon	*Falco subniger*		CE			yes	yes	yes		yes
bird	Black-tailed Godwit	*Limosa limosa*		E					yes		
bird	Blue-billed Duck	*Oxyura australis*		V					yes		
bird	Brolga	*Antigone rubicunda*		E				yes	yes		yes
bird	Bush Stone-curlew	*Burhinus grallarius*		CE				yes			
bird	Caspian Tern	*Hydroprogne caspia*		V				yes	yes		
bird	Chestnut-rumped Heathwren	*Calamanthus pyrrhopygius*		V							yes
bird	Common Sandpiper	*Actitis hypoleucos*		V					yes		yes
bird	Diamond Dove	*Geopelia cuneata*		V							
bird	Diamond Firetail	*Stagonopleura guttata*		V			yes				yes
bird	Eastern Curlew	*Numenius madagascariensis*	CE	CE	yes			yes	yes		yes
bird	Eastern Great Egret	*Ardea alba modesta*		V				yes	yes		
bird	Elegant Parrot	*Neophema elegans*		V							
bird	Fairy Tern	*Sterna nereis*		CE					yes		
bird	Freckled Duck	*Stictonetta naevosa*		E					yes		
bird	Gang-gang Cockatoo	*Callocephalon fimbriatum*	E	E	yes	yes	yes	yes	yes		yes
bird	Great Knot	*Calidris tenuirostris*	CE	CE	yes			yes	yes		yes
bird	Greater Sand Plover	*Charadrius leschenaultii*		V							
bird	Grey Goshawk	*Accipiter novaehollandiae*		E				yes	yes		
bird	Grey Plover	*Pluvialis squatarola*		V							
bird	Grey-crowned Babbler	*Pomatostomus temporalis*		V							
bird	Grey-headed Albatross	*Thalassarche chrysostoma*		E							
bird	Grey-tailed Tattler	*Tringa brevipes*		CE							
bird	Gull-billed Tern	*Gelocheilidon nilotica macrotarsa*		E					yes		yes
bird	Hooded Plover	*Thinornis rubricollis*	V	V	yes				yes		
bird	Hooded Robin	*Melanodryas cucullata cucullata*		V							
bird	Latham's Snipe	*Gallinago hardwickii*	V	V	yes	yes	yes	yes	yes		yes
bird	Lesser Sand Plover	*Charadrius mongolus*	E	E	yes			yes	yes		yes
bird	Lewin's Rail	*Lewinia pectoralis*		V					yes		yes
bird	Little Eagle	*Hieraaetus morphnoides*		V			yes				yes

Taxonomic Group	Common Name	Scientific Name	EPBC - Category of Threat	FFG - Category of Threat	Habitat on City Managed Land	Barwon Plain	Basalt Plains	Cities Geelong	Bellarine	Northern Uplands	Little River
bird	Little Egret	*Egretta garzetta nigripes*		E					yes		
bird	Little Tern	*Sternula albifrons*		CE					yes		yes
bird	Magpie Goose	*Anseranas semipalmata*		V			yes				
bird	Major Mitchell's Cockatoo	*Cacatua leadbeateri*		CE							
bird	Masked Owl	*Tyto novaehollandiae*		CE							
bird	Musk Duck	*Biziura lobata*		V					yes		
bird	Northern Giant-Petrel	*Macronectes halli*		E					yes		
bird	Orange-bellied Parrot	*Neophema chrysogaster*	CE	CE	yes			yes	yes		yes
bird	Pacific Golden Plover	*Pluvialis fuva*		V					yes		yes
bird	Painted Honeyeater	*Grantiella picta*	V	V			yes				yes
bird	Plains-wanderer	*Pedionomus torquatus*	CE	CE			yes	yes			yes
bird	Plumed Egret	*Ardea intermedia plumifera*		CE							
bird	Powerful Owl	*Ninox strenua*		V						yes	yes
bird	Red Knot	*Calidris canutus*	V	E				yes	yes		yes
bird	Ruddy Turnstone	*Arebaria interpres*		V							
bird	Sharp-tailed Sandpiper	*Calidris acuminata*	V	V	yes			yes	yes		yes
bird	Shy Albatross	*Diomedea cauta*	E	E	yes				yes		
bird	Southern Giant-Petrel	*Macronectes giganteus*		E					yes		
bird	Speckled Warbler	*Chthonicola sagittata*		E							yes
bird	Swift Parrot	*Lathamus discolor*	CE	CE	yes	yes	yes	yes	yes	yes	yes
bird	Terek Sandpiper	*Xenus cinereus*		V					yes		
bird	Wandering Albatross	*Diomedea exulans*		CE							
bird	Whimbrel	*Numenius phaeopus*		E					yes		
bird	White-bellied Sea-Eagle	*Haliaeetus leucogaster*		E					yes		yes
bird	White-faced Storm-Petrel	*Pelagodroma marina*		E					yes		
bird	Wood Sandpiper	*Tringa glareola*		E					yes		
bird	White-throated Needletail	*Hirundapus caudacutus*		V				yes			
reptiles	Victorian Grassland Earless Dragon	*Tympanocryptis pinguicolla*	CE	CE			yes	yes			yes
reptiles	Striped Legless Lizard	*Delma impar*	V	E	yes		yes	yes			yes
reptiles	Glossy Grass Skink	*Pseudemoia rawlinsoni*	V	E	likely			yes	yes		
reptiles	Tussock Skink	*Pseudemoia pagenstecheri*		E							
amphibians	Brown Toadlet	*Pseudophryne bibronii*		E							
amphibians	Growling Grass Frog	*Litoria raniformis*	V	V	yes	yes	yes	yes	yes		yes
fishes	Agassiz's Glassfish	*Ambassis agassizii*		E							
fishes	Australian Grayling	*Prototroctes maraena*	E	V	yes			yes	yes		
fishes	Australian Mudfish	*Neochanna cleaveri*		E							
fishes	Macquarie Perch	*Macquaria australasica*		E							
fishes	Yarra Pigmy Perch	*Nannoperca obscura*	V	E	yes	yes		yes	yes		
crustaceans	Hairy Burrowing Crayfish	*Engaeus sericatus*		V							
crustaceans	Otway Burrowing Crayfish	*Engaeus fultoni*		V							
crustaceans	Ghost Shrimp	*Pseudocalliax tooradin*		E							
insects	Fiery Jewel Butterfly	*Hypochrysops ignitus ignitus*		E							
insects	Large Ant Blue Butterfly	*Acrodipsas brisbanensis*		E							
insects	Large River Damselfly	*Caliagrion billinghursti*		V							
insects	Small Ant Blue Butterfly	*Acrodipsas myrmecophila*		E							
insects	Golden Sun Moth	*Synemon plana*	V	V			yes	yes			yes
insects	Yellow Sedge-skipper Butterfly	*Hesperilla flavescens*		E				yes	yes		
echinoderms	Sea-cucumber species	*Thyone nigra*		E							
Brassicaceae	Hairy Shepherd's Purse	*Microlepidium pilosulum*		CE							
Brassicaceae	Forest Bitter-cress	*Cardamine papillata*		E							
Brassicaceae	Spiny Peppercress	*Lepidium aschersonii*	V	E	yes			yes	yes		
Brassicaceae	Western Bitter-cress	*Cardamine lineariloba*		E							
Thymelaeaceae	Spiny Rice-flower	*Pimelea spinescens subsp. spinescens*	CE	CE	yes		yes	yes			yes

Taxonomic Group	Common Name	Scientific Name	EPBC - Category of Threat	FFG - Category of Threat	Habitat on City Managed Land	Barwon Plain	Basalt Plains	Cities Geelong	Bellarine	Northern Uplands	Little River
Malvaceae	Salt Lawrencia	*Lawrencia spicata*		E							
Malvaceae	Coast Hollyhock	*Malva preissiana s.s. (white-flowered coastal form)*		E							
Orchidaceae	Mauve-tuft Sun-orchid	*Thelymitra malvina*		CE							
Orchidaceae	Crimson Sun-orchid	*Thelymitra X macmillanii*		V							
Orchidaceae	Small Golden Moths	*Diuris basaltica*	E	CE				yes			
Orchidaceae	Brittle Greenhood	*Pterostylis truncata*		CE							
Orchidaceae	Sharp Greenhood	*Pterostylis X ingens*		V							
Orchidaceae	Fragrant Leek-orchid	*Prasophyllum suaveolens*	E	CE				yes			
Orchidaceae	Naked Beard-orchid	*Calochilus imberbis*		CE							
Orchidaceae	Large White Spider-orchid	*Caladenia venusta*		E							
Orchidaceae	Winter Sun-orchid	*Thelymitra hiemalis*		CE							
Orchidaceae	Slender Pink-fingers	*Caladenia vulgaris*		V							
Orchidaceae	Naked Sun-orchid	*Thelymitra circumsepta*		E							
Orchidaceae	Dense Leek-orchid	*Prasophyllum spicatum*	V	CE				yes			
Orchidaceae	Swamp Diuris	*Diuris palustris*		E							
Orchidaceae	Mentone Greenhood	*Pterostylis X toveyana*		E							
Orchidaceae	Green Leek-orchid	*Prasophyllum lindleyanum*		E							
Orchidaceae	Ornate Pink-fingers	*Caladenia ornata*	V	E							yes
Orchidaceae	Matted Flax-lily	*Dianella amoena*	E	CE	yes		yes				yes
Orchidaceae	Arching Flax-lily	*Dianella sp. aff. Longifolia*		CE							
Casuarinaceae	Buloke	*Allocasuarina luehmannii*		CE							
Poeae	Coast Fescue	*Poa billardierei*		E							
Poeae	Dune Poa	*Poa poiformis var. ramifer*		E							
Mimosaceae	Cup Wattle	*Acacia cupularis*		CE							
Mimosaceae	Rough Wattle	*Acacia aspera subsp. parviceps*		E							
Mimosaceae	Coast Wirilda	*Acacia uncifolia*		E							
Mimosaceae	Snowy River Wattle	*Acacia boormanii*		E	?						
Fabaceae	Clover Glycine	*Glycine latrobeana*	V	V				yes			
Fabaceae	Southern Swainson-pea	*Swainsona behriana*		E							
Fabaceae	Small Scurf-pea	*Cullen parvum*		E							
Fabaceae	Scented Bush-pea	*Pultenaea graveolens*		E							
Fabaceae	Golden Bush-pea	*Pultenaea gunnii subsp. tuberculata*		V							
Fabaceae	Wiry Bossiaea	*Bossiaea cordigera*		E							
Fabaceae	Tough Scurf-pea	*Cullen tenax*		E							
Fabaceae	Swamp Bush-pea	*Pultenaea weindorferi*		E							
Fabaceae	Hoary Bush-pea	*Pultenaea daltonii*		V							
Polygalaceae	Small Milkwort	*Comesperma polygaloides*		CE							
Asteraceae	Swamp Everlasting	*Xerochrysum palustre*	V	CE					yes		
Asteraceae	Velvet Daisy-bush	*Olearia pannosa subsp. cardiophylla*		E							
Asteraceae	White Sunray	*Leucochrysum albicans subsp. tricolor*	E	E			yes				
Asteraceae	Lanky Buttons	*Leptorhynchos elongatus*		E							
Asteraceae	Branching Groundsel	*Senecio cunninghamii var. cunninghamii*		E							
Asteraceae	Satin Daisy-bush	*Olearia minor*		E							
Asteraceae	Button Wrinklewort	*Rutidosis leptorhynchoides*	E	E	yes		yes	yes	yes		yes
Asteraceae	Pale Swamp Everlasting	*Coronidium gunnianum*		CE							
Asteraceae	Large-headed Fireweed	*Senecio macrocarpus*	V	CE			yes	yes			yes
Asteraceae	Basalt Podolepis	*Podolepis linearifolia*		E							
Asteraceae	Cut-leaf Burr-daisy	*Calotis anthemoides*		CE							
Proteaceae	Small-flower Grevillea	*Grevillea micrantha*		CE							
Proteaceae	Smooth Grevillea	*Grevillea rosmarinifolia subsp. glabella*		E							
Proteaceae	Golden Grevillea	*Grevillea chrysophaea*		V							
Proteaceae	Brisbane Range Grevillea	*Grevillea steiglitziana*		E							
Amaranthaceae	Hairy Tails	*Ptilotus erubescens*		CE	yes				yes		

Taxonomic Group	Common Name	Scientific Name	EPBC - Category of Threat	FFG - Category of Threat	Habitat on City Managed Land	Barwon Plain	Basalt Plains	Cities Geelong	Bellarine	Northern Uplands	Little River
Plumbaginaceae	Yellow Sea-lavender	*Limonium australe*		E							
Chenopodiaceae	Marsh Saltbush	*Atriplex paludosa subsp. paludosa*		E							
Chenopodiaceae	Coast Saltwort	*Salsola tragus subsp. pontica*		E							
Chenopodiaceae	Fragrant Saltbush	*Rhagodia parabolica*		V							
Myrtaceae	Yarra Gum	*Eucalyptus yarraensis*		CE							
Myrtaceae	Melbourne Yellow-gum	*Eucalyptus leucoxylon subsp. connata*		E							
Myrtaceae	Bellarine Yellow-gum	*Eucalyptus leucoxylon subsp. bellarinensis*		CE							
Myrtaceae	Gum-barked Bundy	*Eucalyptus goniocalyx subsp. laxa*		V							
Euphorbiaceae	Coast Bitter-bush	*Adriana quadripartita*		E							
Poaceae	Small-flower Wallaby-grass	*Rytidosperma monticola*		E							
Poaceae	Purple Blown-grass	*Lachnagrostis punicea subsp. semibarbata*		E							
Poaceae	Adamson's Blown-grass	*Lachnagrostis adamsonii*	E	E				yes	yes		
Poaceae	Straw Wallaby-grass	*Rytidosperma richardsonii*		E							
Poaceae	Rye Beetle-grass	*Tripogonella loliiformis*		E							
Poaceae	Salt Blown-grass	*Lachnagrostis robusta*		E							
Juncaceae	Creeping Rush	*Juncus revolutus*		E							
Cyperaceae	Hoary Rapier-sedge	*Lepidosperma canescens*		E							
Solanaceae	Austral Tobacco	*Nicotiana suaveolens*		E							
Lamiaceae	Snowy Mint-bush	*Prostanthera nivea var. nivea*		R #							
Verbenaceae	Grey Mangrove	*Avicennia marina subsp. australasica*		E							
Plantaginaceae	Winged Water-starwort	*Callitriche umbonata*		E							
Orobanchaceae	Rough Eyebright	*Euphrasia scabra*		E							
Orobanchaceae	Purple Eyebright	*Euphrasia collina subsp. muelleri*	E	E			yes				
Orobanchaceae	Buloke Mistletoe	*Amyema linophylla subsp. Orientalis*		CE							
Loranthaceae	Drooping Mistletoe	*Amyema pendula subsp. longifolia*		CE							
Zosteraceae	Tasman Grass-wrack	*Heterozostera tasmanica*		E							
Zosteraceae	Australian Grass-wrack	*Heterozostera nigricaulis*		E							
Juncaginaceae	Tiny Arrowgrass	*Triglochin minutissima*		E							
Juncaginaceae	Prickly Arrowgrass	*Triglochin mucronata*		E							
Zygophyllaceae	Coast Twin-leaf	*Roepera billardierei*		E							
Geraniaceae	Pale-flower Crane's-bill	*Geranium sp. 3*		E							
Geraniaceae	Austral Crane's-bill	*Geranium solanderi var. solanderi s.s.*		E							
community	Natural Temperate Grasslands of the Victorian Volcanic Plains		CE	CE	yes		yes	yes			yes
community	Grassy Eucalypt Woodland of the Victorian Volcanic Plains		CE	CE			yes				yes
community	Seasonal Herbaceous Wetland of the Temperate Lowland Plains		CE	CE	yes		yes		yes		yes
community	Natural Damp Grasslands of the Victorian Coastal Plain		CE	Th							
community	Subtropical and Temperate Coastal Saltmarsh		V	V	yes			yes	yes		yes
community	Grey Box (Eucalyptus microcarpa) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia		E		yes						
community	Coastal Moonah (*Melaleuca lanceolata subsp. lanceolata*) Woodland Community			Th	Yes				yes		
community	Western (Basalt) Plains Grassland community			Th			yes		yes		yes
community	Western Basalt Plains (River Redgum) Grassy Woodland Floristic Community 5504			Th							
community	Grey Box - Buloke Grassy Woodland Community			Th							

References:

Atlas of Living Australia - https://www.ala.org.au/

Flora and Fauna Guarantee Act 1988 Threatened List, September 2025

Threatened species under the EPBC Act - DCCEEW

SWIFFT - State Wide Integrated Flora and Fauna Teams - Threatened Species - https://www.swifft.net.au/

Victorian Biodiversity Atlas

Appendix 3: Environment Volunteer Groups and Networks

GROUP	LOCATION	ACTIVITY
Barwon Plain		
Barrabool Hills Landcare Group	Barrabool Hills	Caring for Landscapes
Basalt Plain		
Anakie Community Garden	Anakie	Sustainable Living
Grassy Plains Network	Basalt Plains	Networks / Other
Laracare	Lara	Caring for Landscapes
Moorabool Catchment Landcare Group	Bacchus Marsh	Caring for Landscapes
Moorabool Environment Group	Bacchus Marsh	Caring for Landscapes
Mt Rothwell Friends	Mt Rothwell	Caring for Landscapes
North West Alliance	Basalt Plains	Networks / Other
Victorian National Parks Association	Basalt Plains	Networks / Other
Bellarine and Surfcoast		
100% Clean Bellarine	Barwon Heads	Sustainable Living
Barwon Estuary Project	Barwon Heads	Caring for Landscapes
Barwon Heads Community Arts Garden	Barwon Heads	Sustainable Living
Barwon Heads Landcare Group	Barwon Heads	Caring for Landscapes
Barwon Region Alliance for Community Energy (BRACE)	Barwon Heads	Sustainable Living
*Beach Patrol - Bellarine	Ocean Grove	Caring for Landscapes
*BeachWatch	Bellarine Peninsula	Caring for Landscapes
Bellarine Catchment Network	Queenscliff	Networks / Other
*Bellarine Landcare Group	Bellarine Peninsula	Caring for Landscapes
Bellarine Landcare Nursery	Drysdale	Caring for Landscapes
Bellarine Landcare Rabbit Action Group	Mannerim	Caring for Landscapes
Bellarine Marine Care Group	Bellarine Peninsula	Caring for Landscapes
*Bellarine Peninsula Orange-bellied Parrot Regional Group	Bellarine Peninsula	Citizen Science
*Birdlife Australia - Bellarine Peninsula	Bellarine Peninsula	Citizen Science
Boomerang Bags – Leopold	Leopold	Sustainable Living
Born Wild Community	Bellarine Peninsula	Caring for Landscapes
Breamlea Coast Action	Breamlea	Caring for Landscapes
*Breamlea Community Association	Breamlea	Caring for Landscapes
*Clifton Springs Curlewis Coastcare	Clifton Springs	Caring for Landscapes
Connewarre Landcare Group	Connewarre	Caring for Landscapes
*Drysdale Clifton Springs Curlewis Association	Drysdale	Caring for Landscapes
*Friends of Begola Wetlands	Ocean Grove	Caring for Landscapes
*Friends of Buckley Park Foreshore	Ocean Grove	Caring for Landscapes
Friends of Edwards Point Wildlife Reserve	St Leonards	Caring for Landscapes
*Friends of Indented Head Woodland	Indented Head	Caring for Landscapes
*Friends of Moonah Park	Barwon Heads	Caring for Landscapes
Friends of Ocean Grove Nature Reserve	Ocean Grove	Caring for Landscapes
Friends of Point Richards Flora and Fauna Reserve	Portarlington	Caring for Landscapes
*Friends of Ramblers Road Foreshore	Portarlington	Caring for Landscapes
*Friends of the Basin Reserve	Drysdale	Caring for Landscapes
*Friends of the Bellarine Rail Trail	Leopold	Caring for Landscapes
Friends of the Bluff	Barwon Heads	Caring for Landscapes
*Friends of the Hooded Plover - Bellarine	Ocean Grove	Caring for Landscapes
Friends of The Lobster Pot	Barwon Heads	Caring for Landscapes
Ocean Grove Coastcare	Ocean Grove	Caring for Landscapes
*Ocean Grove Community Association	Ocean Grove	Caring for Landscapes
Ocean Grove Park Inc	Ocean Grove	Caring for Landscapes

GROUP	LOCATION	ACTIVITY
Ocean Grove Rotary	Ocean Grove	Sustainable Living
Queenscliff Indigenous Nursery	Queenscliff	Caring for Landscapes
*Repair Café Bellarine	Ocean Grove	Sustainable Living
*St Leonards Community Care	St Leonards	Caring for Landscapes
Swan Bay Environment Association	Swan Bay	Caring for Landscapes
Transition Network/Towns - Barwon Heads	Barwon Heads	Sustainable Living
*Weekday Weeders	Ocean Grove	Caring for Landscapes
Australian Parents 4 Climate Action - Geelong and Bellarine	Bellarine Peninsula	Sustainable Living
Geelong Cities		
Australian Conservation Foundation	Geelong	Caring for Landscapes
Avalon Landcare Group	Lara	Caring for Landscapes
*Batesford - Fyansford - Stonehaven Landcare Group	Batesford	Caring for Landscapes
*Bats of Geelong	Geelong	Caring for Landscapes
*Beach Patrol - Geelong	Geelong	Caring for Landscapes
Boomerang Bags - Armstrong Creek	Armstrong Creek	Sustainable Living
Boomerang Bags - Norlane	Norlane	Sustainable Living
*Corio Bay Angling Club	Geelong	Caring for Landscapes
*Conservation Volunteers Australia	Statewide	Networks / Other
Corio Landcare	Corio	Caring for Landscapes
Dog Rocks Flora and Fauna Sanctuary	Batesford	Caring for Landscapes
Fishcare Victoria Inc -Geelong and Bellarine	Geelong	Caring for Landscapes
*Friends of Buckley Falls	Highton	Caring for Landscapes
*Friends of Cowies Creek	Cowies Creek	Caring for Landscapes
*Friends of Geelong Botanic Gardens	Geelong	Caring for Landscapes
*Friends of Jerringot Wetlands	Geelong	Caring for Landscapes
*Friends of Kevin Kirby Reserve	Herne Hill	Caring for Landscapes
*Friends of Rippleside Park & Environs Inc [FORPE]	Drumcondra	Caring for Landscapes
*Friends of Waurn Ponds Creek	Waurn Ponds	Caring for Landscapes
*Gardens for Wildlife - Geelong	Geelong	Caring for Landscapes
Gardens for Wildlife - Point Lonsdale	Point Lonsdale	Caring for Landscapes
*Geelong Environment Council Inc	Geelong	Caring for Landscapes
*Geelong Field Naturalist Club	Geelong	Caring for Landscapes
Geelong Intrepid Landcare	Geelong	Caring for Landscapes
Geelong Landcare Network	Geelong	Networks / Other
Geelong Repair Café	Highton	Sustainable Living
Geelong Sustainability Group	Geelong	Sustainable Living
*Greening Australia	Corio	Networks / Other
Highton Rotary	Geelong	Sustainable Living
Serendip Sanctuary Volunteers	Lara	Caring for Landscapes
*Sparrovale Wetlands Waterwatch	Charlemont	Citizen Science
St Luke's Uniting Church Environment Action Group	Highton	Caring for Landscapes
Transition Network/Towns - East Geelong	East Geelong	Sustainable Living
Transition Network/Towns - Geelong (Transition Streets)	Norlane	Sustainable Living
Urban Upcycle	Grovedale	Sustainable Living
Victorian Serrated Tussock Working Party	Geelong	Networks / Other
Wathaurong Community	North Geelong	Caring for Landscapes
Little River		
*Brisbane Ranges Landcare Group	Anakie	Caring for Landscapes
Friends of the Brisbane Ranges	Anakie	Caring for Landscapes
Little River Community Landcare	Little River	Caring for Landscapes
Northern Uplands		
Koala Clancy Foundation	Staughton Vale	Networks / Other

*Groups that work on City managed land

Appendix 4: Biolink Areas

BIOLINK AREAS

Corridors (C): geographical area that provides suitable conditions for animal and plant movement through the landscape

Priority Corridor (PC): geographical area such as major rivers, waterways, coast and wetlands that are highly significant for animal and plant movement through the landscape

Zone (Z): geographical area > 100 hectares comprising multiple habitat features and highly significant for biodiversity

Habitat Node (HN): geographical area of habitat >10 hectares comprising either remnant vegetation or wetlands

Restoration Node (RN): geographical area mostly >100 hectares owned by one entity where habitat can be restored through revegetation/direct seeding

BIOLINK NAME	BIOLINK NUMBER	DESCRIPTION	VALUES
Kardina Creek	C1	Kardina Creek west of the Geelong Ring Road through to Pepperdine and Shoubra Reserve in Highton	EPBC: Gang-gang Cockatoo Common Eastern Froglet, Pobblebonk/Banjo Frog, Spotted Marsh Frog and Southern Brown Tree Frog
Fyansford Unused Rail Reserve	C2	Extends from the old cement works to the Geelong Railway	Provides a restoration link between the Moorabool River and Cowies Creek
Rippleside	C3	Links Fyansford Unused Rail link to the Bay via Geelong Golf Course, Saleyard and Council managed crown land	opportunities to connect corridors and restore habitat in urban landscape
Cuthbertson Creek	C4	Princess Highway to the Bay at Geelong Port	opportunity to restore a habitat corridor in urban landscape
Shell Creek	C5	Through Viva to the Bay	opportunity to restore a habitat corridor in urban landscape
Easement South of Geelong Ring Road to Cowies Creek	C6	Easement South of Geelong Ring Road to Cowies Creek	opportunities to connect corridors and restore habitat in urban landscape
Hovells Creek Tributary (1)	C7	Northern Conservation Reserve to Hovells Creek	EPBC: Natural Temperate Grassland, Golden Sun Moth, Stripped Legless Lizard
Bacchus Marsh Roadside	C8	Bacchus Marsh Roadside - from Geelong city to	EPBC: Golden Sun Moth
Hovells Creek Tributary (2)	C9	Hovells Creek to Serendip Sanctuary	EPBC: Grassland Earless Dragon Serendip Sanctuary
Hovells Creek Tributary (3)	C10	Mt Anakie to Barwon Prison through to Hovells Creek	corridor restoration opportunity, Fat-tailed Dunnart
Peak School Road	C11	Peak School Road from Old Melbourne Road to the unused section on the west of Bacchus Marsh Road. Includes Blairs Road.	EPBC: Natural Temperate Grassland, Spiny Rice-flower
Hovells Creek Tributary (4)	C12	North of Peak School Road to Hovells Creek	corridor restoration opportunity
Granite Roadside	C13	Granite Roadside from Staughton Vale Road to Hovells Creek	Grassy Woodland Hills Herb-rich Woodland roadside that links other corridors, large old remnant trees
Sandy Creek	C14	Along Sandy Creek through proposed solar farm joining Stony Creek west of Mt Rothwell	corridor restoration opportunity, Fat-tailed Dunnart
Staughton Vale Roadside	C15	Staughton Vale Roadside from Ballan Road to Murphy's Road	Melbourne Yellow Gums, Grassy Woodland, Plains Grassy Woodland, large old remnant trees, one of the largest old redgums known in the City in the triangle reserve, Brisbane Ranges National Park (adjoins), crosses Stony Creek, Little River
Stony Creek	C16	Stony Creek - connects the Brisbane Ranges to Little River	Grassy Woodland, large old remnant trees, koalas, corridor restoration opportunity

BIOLINK NAME	BIOLINK NUMBER	DESCRIPTION	VALUES
Balliang Creek	C17	Sharkey Property - part of link that flows into the Little River	Buloke Woodland, Large old remnant trees
Mt Rothwell to Little River	C18	Revegetation out the front of Mt Rothwell, Smith property to Worthy.	EPBC: Natural Temperate Grassland, Matted Flax Lily koalas, koala Clancey Project Area (partnership with Melbourne Water), habitat restoration works, old remnant trees, Fat-tailed Dunnart, raptors
Western Grassland Reserve	C19	Little River tributary	Future Western Grassland Reserve, Fat-tailed Dunnart, raptors
Melbourne - Geelong Railway	C20	Lara to Little River	EPBC: Natural Temperate Grassland
Avalon	C21	Gillet's Road to Avalon Coast - stops at the Princes Highway - almost makes it to the Old Melbourne Road Biolink. Includes the Cheetham Saltworks	Ramsar site -migratory birds EPBC: Natural Temperate Grassland, Coastal Saltmarsh, Spring Rice-Flower
Scarborough Creek	C22	Western creek that flows into the bay at Clifton Springs	opportunity to restore a habitat corridor in urban landscape
Clifton Springs Golf Course Creek West	C23	Creek flows from beyond Portarlington Road to the Bay	corridor restoration opportunity
Clifton Springs Golf Course Creek East	C24	Creek flows from near Portarlington Road to the Bay	Close to a patch of Old Sheoak, Podolepis sp, Ptilotus macrocephalus, corridor restoration opportunity
Ibbotson's	C25	North South Link between Indented Head and St Leonards	Diverse patch of Grassy Woodland at McCarthys Reserve with over 60 different species many rare on the Bellarine Supports connection between Edwards Point, Salt Lagoon & The Bay
McDonald Creek	C26	Small creek on private land flowing into Swan Bay - Port Phillip Marine National Park	Ramsar site - migratory birds Swan Bay - Port Phillip Marine National Park, corridor restoration opportunity, remnant vegetation
Yarram Creek North	C27	Yarram Creek and tributaries connecting to the Drysdale and Wallington corridors	corridor restoration opportunity
Wallington Waterway	C28	Connects Lake Connewarre to remnant trees and small landholdings around Wallington west of Grubb Road	corridor restoration opportunity
Ocean Grove	C29	Ocean Grove Nature Reserve to Lake Connewarre	EPBC: Swift Parrot, Latham's Snipe, Black Falcon, Royal Spoonbill, Grey Goshawk, Bellarine Yellow Gum, Hoary Rapier-sedge
Barwon Heads	C30	Includes Barwon Heads Village Park and the Warrenbeen ESO Area	Coastal Moonah Woodland, Royal Spoonbill, Bellarine Yellow Gum, Moonahs, large old remnant trees, Leafy Greenhood, Coast Twin-leaf, Coast Wirilda
Sparrovale Wetlands Reserve - *Ngubitj yoorree*	HN1	Sparrovale Wetlands Reserve - *Ngubitj yoorree*	EPBC: Growling Grass Frog, Yarra Pygmy Perch, Orange Bellied Parrot, Spiny Peppercress Nationally significant number of Sharp-tailed sandpipers (6000+) observed 2021 Yellow Sedge-skipper Butterfly, migratory birds, adjoins Ramsar sites, 4km of Barwon River frontage
Belmont Wetlands	HN2	Belmont Common, Jerringot, Barwon Golf Course, Breakwater wetlands, Aquaduct Park	EPBC: Latham's Snipe migratory birds, brolgas, platypus, high quality wetlands adjoin the Barwon River
Barwon - Moorabool River Confluence	HN3	Barwon - Moorabool River Confluence	cultural values, platypus, large old remnant trees, confluence of the Barwon and Moorabool Rivers
Dog Rocks and Honeys Woodland	HN4	Dog Rocks and Honeys Woodland	koalas, platypus, large old remnant trees, Moorabool River Frontage
Lara Golf Course	HN5	Lara Golf Club in Lara	Potential restoration opportunity
Northern Conservation Reserve	HN6	Northern Growth Area - Conservation Reserve - Staceys Road	EPBC: Natural Temperate Grassland, Stripped Legless Lizard, Golden Sun Month
Sutherland Creek Woodlands	HN7	Sutherland Creek Woodlands	large old remnant trees- River Red Gums, Grey Box, close to priority corridor, Plains Grassy Woodland
Lynch Road Grassy Woodlands	HN8	Lynches Road Grassy Woodland	koalas, Manna Gum Woodland

BIOLINK NAME	BIOLINK NUMBER	DESCRIPTION	VALUES
Northern Uplands Dry Forests	HN9	Northern Upland dry Forests	large old remnant trees - box iron bark forest, Melbourne Yellow Gums, Redbox, Red Stringy bark, koalas, Jolly's Reserve
Anakie Woodlands	HN10	Anakie Woodland	koalas, remnant vegetation, large old remnant trees, Scoria Cone Woodland
Granitic Hills Woodland	HN11	Granitic Hills Woodland	remnant vegetation, large old remnant trees - Melbourne Yellow Gum, Manna Gum, Red Stringbark
Brisbane Ranges	HN12	PV managed Brisbane Ranges National Park and adjoining private land	Brisbane Ranges National Park, koalas, large old remnant trees, high quality remnants
Swamp Road Swamp and Woodland	HN13	Swamp Road Swamp and Woodland	high quality lignum swamp,
Sharkey's Swamp and Buloke Woodlands	HN14	Sharkeys Swamp and Buloke Woodland	EPBC: potential Grey Box - Buloke Grassy Woodland Community large old remnant trees - bulokes
Mt Rothwell	HN15	Mt Rothwell Little River - private wildlife sanctuary	473 hectares of predator free safe haven for native wildlife, native grasslands and grassy Woodlands, koalas, adjoins future Western Grassland Reserve
Little River - Ripley Road Grasslands	HN16	Little River Ripley Road/ Kirk Bridge Road Grasslands and Shrublands	EPBC: Natural Temperate Grassland, Stripped Legless Lizard high quality remnant vegetation, Fat-tailed Dunnart, Cunningham Skink
Ford Proving Ground	HN17	Ford Proving Grounds and associated private land to the north of the You Yangs	EPBC: potential Grey Box - Buloke Grassy Woodland Community high quality remnant, large old remnant trees - Yellow Box
Wooloomanata Station	HN18	Wooloomanata Station	large old remnant trees - redgums, Plains Grassy Woodland, Creek line Grassy Woodland
You Yangs	HN19	PV Managed You Yangs	You Yangs
Serendip	HN20	PV Managed Serendip	Serendip
Western Treatment Plant	HN21	Western Treatment Plant	Ramsar site - migratory birds EPBC: Subtropical and Temperate Coastal Saltmarsh, Orange-bellied Parrot Fat-tailed Dunnart
Avalon Airport South	HN22	Avalon Airport - south	Ramsar site - migratory birds EPBC: Subtropical and Temperate Coastal Saltmarsh, Orange-bellied Parrot Fat-tailed Dunnart
Cheatham Saltworks - including Avalon Coast	HN23	Cheatam Saltworks - including Avalon Coast	Ramsar site - migratory birds EPBC: Subtropical and Temperate Coastal Saltmarsh, Orange-bellied Parrot Fat-tailed Dunnart
Corio Grassland	HN24	Corio Grassland, Shell Parade	EPBC: Natural Temperate Grassland partly City owned partly private
Eastern Park, GBG and Golf Course	HN25	Eastern Park, GBG and East Geelong Golf Course	EPBC: Grey Headed Flying Fox Nationally significant GHFF Camp, native grasslands
Moolap Saltworks and Point Henry	HN26	Moolap Saltworks and Point Henry	Proposed Ramsar site EPBC: Subtropical and Temperate Coastal Saltmarsh, Orange-bellied Parrot
Drysdale Wetlands - Lake Lorne and McLeods Waterholes	HN27	Drysdale Reserves including the Basin, Belchers, Lake Lorne, McLeods Waterhole and associated remnants on private land	EPBC: Latham's Snipe City nature reserves - The Basin, Belchers, Lake Lorne, McLeods Waterhole, high quality remnants on private. Heathy Woodland, large old remnant trees and grass trees, migratory birds, water birds
Portarlington Reserve and Point Richards Flora Reserve	HN28	Portarlington Reserves and adjoining private land	EPBC: Subtropical and Temperate Coastal Saltmarsh, Orange-bellied Parrot, Growling Grass-frog, Australasian Bittern Red-capped plover breeding site, Brown Quail, Birding Hotspot
Indented Head woodlands	HN29	Indented Head Woodland Nature Reserve, Barwon Water and Private Land	EPBC: Latham's Snipe Large Old Trees - Redgums

BIOLINK NAME	BIOLINK NUMBER	DESCRIPTION	VALUES
Salt Lagoon and Sheoak Woodland	HN30	PV Salt Lagoon, adjoining City nature reserve and private land remnants	EPBC: Subtropical and Temperate Coastal Saltmarsh migratory birds Coastal habitat, remnant Moonahs
Edwards Point Wildlife Reserve	HN31	PV managed Edwards Point Wildlife Reserve	EPBC: Subtropical and Temperate Coastal Saltmarsh, Orange-bellied Parrot Edwards Point Wildlife Reserve, migratory birds
Anderson Roadside woodlands and saltmarsh	HN32	Grassy Woodland remnants on private land and roadsides - Grassy Point Road and Anderson Road	EPBC: Glossy Grass-skink Grassy Woodland remnants on private land and roadsides - Grassy Point Road and Anderson Road, Sheoak Woodland, Bellarine Yellow Gums
Swan Bay Road Sheoak woodland	HN33	Swan Bay Road remnant sheoak woodland	Approximately 60 hectares Sheoak Woodland likely the largest remaining on the Bellarine Peninsula
Swan Bay south and Yarram Creek	HN34	Swan Bay south and Yarram Creek	EPBC: Subtropical and Temperate Coastal Saltmarsh, Orange-bellied Parrot Coastal Alkaline Scrub remnants, Grassy Woodland, high quality remnants
South-east Bellarine wetlands Moonahwarri and Moonah Woodland	HN35	PV managed Lake Victoria and smaller lakes (Moonahwarri), Coastal Moonah Woodland	EPBC: Subtropical and Temperate Coastal Saltmarsh, Hooded Plover Large patch of Coastal Moonah Woodland, migratory Birds, adjoins Buckley Park Foreshore Reserve, State Significant Landscape, Flows into nearby Swan Bay Marine Park and Ramar Wetland
Kingston Park and surrounding remnants	HN36	Kingston Park Nature Reserve and surrounding Remnants	EPBC: Swift Parrot Grassy Woodland, large old remnant trees, Bellarine Yellow Gums, wildflowers and native grasses
Maddens Woodlands	HN37	Mannerim Woodland Marcus Hill	adjoins Murk Ngubitj Yarram Yaluk and Yarram Creek, high quality remnant vegetation, Grassy Woodland and Heathy Woodland
The Grubb Road woodlands Wallington	HN38	Grubb Road Woodlands, Wallington	EPBC: Swift Parrot, near Murk Ngubitj Yarram Yaluk and Yarram Creek, high quality remnant vegetation, large old remnant trees, Grassy woodland and Heathy Woodland
Wallington Woodland	HN39	Remnant Woodland east and west of Wallington Road	Roadside vegetation, Bellarine Yellow Gums, Old Trees
Ocean Grove Nature Reserve and surrounds	HN40	Ocean Grove Nature Reserve, Yellow Gum Nature Reserve and associated Grassy Woodland remnants on private land	EPBC: Swift Parrot Ocean Grove Nature Reserve, Yellow Gum Nature Reserve, Grassy Woodland, Bellarine Yellow Gum Woodland, large old remnant trees - Bellarine Yellow Gums and Manna Gums, kookaburra, echidna
Lake Connewarre	HN41	Lake Connewarre Barwon River Corridor	Ramsar site - migratory birds EPBC: subtropical and Temperate Coastal Saltmarsh, Orange-bellied Parrot
Murtnaghurt Wetland and 13th Beach Golf Course	HN42	Murtneghurt Wetland, 13th Beach Golf Course and Barwon Heads Golf Course	EPBC: Subtropical and Temperate Coastal Saltmarsh Murtnaghurt wetland, migratory birds, Coast Fescue, good quality remnant vegetation
Breamlea Flora and Fauna Reserve	HN43	PV Managed Breamlea Flora and Fauna Reserve and Karaf Wetland	EPBC: Subtropical and Temperate Coastal Saltmarsh, Hooded Plover migratory birds
Armstrong Creek Corridor	PC1	Armstong Creek Headwaters to Sparrovale Wetland Reserve	large old remnant trees, Dooliebeal Reserve, remnants, cultural values, riparian restoration
Waurn Ponds Creek	PC2	Waurn Ponds Creek from City boundary to Breakwater Wetlands	EPBC: Yarra Pygmy Perch, Latham's Snipe platypus, cultural values, riparian restoration
Barwon River	PC3	Barwon River connecting the coast to the City boundary	Ramsar site - migratory birds EPBC: Gang-gang cockatoo, Latham's Snipe, Australian Grayling, Yarra Pygmy Perch, major wildlife corridor from the coast eventually through to the Otway, cultural values, brolgas, platypus, large old remnant trees, riparian restoration Adjoins Porronggitj Karrong, Sparrovale - Nubitj-yoorree
Moorabool River	PC4	From Redgum Island to Sutherlands Creek	major wildlife corridor from the confluence of the Barwon River eventually through to the Wombat Forest and Brisbane Ranges hinterland, cultural values, platypus, koalas, large old remnant trees, riparian restoration

BIOLINK NAME	BIOLINK NUMBER	DESCRIPTION	VALUES
Cowies Creek	PC5	Cowies Creek	EPBC: Growling Grass Frog cultural values, riparian restoration
Ballarat Rail Reserve	PC6	Extends from Evans Road to the Moorabool River linking Cowies Creek to the Moorabool River	opportunities to connect corridors and restore habitat in urban landscape
Sutherland Creek	PC7	Starts up at the Brisbane Ranges in the north of the City joins the Moorabool River north of Batesford	Large old remnant trees, koalas, Jolly's reserve
Anakie Creek	PC8	Sutherlands Creek to Hovells Creek	corridor restoration opportunity, remnant vegetation
Hovells Creek	PC9	Extends from the northern uplands through the basalt plains joining Corio Bay at the Ramsar site	Ramsar site - migratory birds Large old remnant trees, koala habitat
Little River	PC10	From the Bay to Brisbane Ranges	Ramsar site - migratory birds EPBC: Natural Temperate Grasslands, Subtropical and Temperate Coastal Saltmarsh, Orange-bellied Parrot Western Treatment Plant, Fat-tailed Dunnart, raptors
Old Melbourne Roadside	PC11	From Lara to Little River	EPBC: Natural Temperate Grassland, Spiny Rice-flower Native grassland with diversity of species including wildflowers, three chain road reserve
Limeburner's Bay to Little River Coast	PC12	Little River to Limeburner's Bay	Ramar site - migratory birds EPBC: Subtropical and Temperate Coastal Saltmarsh, Orange-bellied Parrot Burrunan Dolphin, Western Treatment Plant, Hovells Creek, Little River
Corio Bay	PC13	Limeburner's Bay to Point Henry on the coast	Ramsar site - migratory birds EPBC: Subtropical and Temperate Coastal Saltmarsh, Grey Headed Flying Fox Plains Grassland, Shell Foreshore, Hovells Creek, Burrunan Dolphin, Rakali, Fiddler Rays
Bellarine Bay Coast	PC14	Point Henry to Point Lonsdale	Ramsar site - migratory birds EPBC: Subtropical and Temperate Coastal Saltmarsh, Orange-bellied Parrot Edwards Point Wildlife Reserve, Swan Bay - Port Phillip Marine National Park Point Richards Flora and Fauna Reserve, Portarlington Recreation Reserve Coastal Moonah Woodland, Headland Scrub, Red-capped plover breeding site
South Bellarine Ocean Coast	PC15	Ocean coast between Breamlea and Point Lonsdale	EPBC: Subtropical and Temperate Coastal Saltmarsh, Hooded Plover migratory birds, Breamlea Flora and Fauna Reserve, Murtnaghurt wetland, Barwon Bluff Marine Sanctuary, Moonahwarri Wetlands (adjoins), Coastal Moonah Woodland, large old remnant trees, spinifex grassland, Barwon Heads and Thirteen Beach Golf Clubs, State Significant landscape (DAL), Double-banded Plover, Red-capped Plover
Murtnaghurt	PC16	North south link including existing crown land connecting Lake Connewarre via Murtnaghurt to the coast	EPBC: Subtropical and Temperate Coastal Saltmarsh Murtnaghurt wetland, migratory birds, Coast Fescue
Bluestone School	PC17	North south link across private land linking Lake Connewarre with Thirteenth Beach	Brolga, Coast Fescue, Coast Bitter-bush
Yellow Gums	PC18	Ocean Grove Nature Reserve to Lake Connewarre	Grassy Woodland, Bellarine Yellow Gum, large old remnant trees
Wallington	PC19	Ocean Grove Nature Reserve to Wallington, Murk Ngubitj Yarram Yaluk and Swan Bay Road	Grassy Woodland, Sheoaks, High quality Heathy Woodland, Austral Grass-trees, Leafy Greenhood
Drysdale	PC20	Murk Ngubitj Yarram Yaluk, Griggs Creek to the Bay at Clifton Springs	EPBC: Latham's Snipe migratory birds, Murk Ngubitj Yarram Yaluk (Barwon Waters new Nature Reserve), Belchers Reserves, Basin Reserve, Lake Lorne, McLeod's Waterhole, Griggs Creek, large old remnant trees, Heathy Woodland, Grassy Woodland, wedge-tailed eagles
Leopold	PC21	Green Wedge between Geelong and Leopold linking Lake Connewarre to the Bay	Ramsar site - migratory birds large old remnant tree, corridor restoration opportunity

BIOLINK NAME	BIOLINK NUMBER	DESCRIPTION	VALUES
Bellarine Rail Trail	PC22	Rail Reserve extending from Geelong to Queenscliff	Ramsar site - migratory birds Major link between Geelong and Swan Bay, Swan Bay - Port Phillip Marine National Park, corridor restoration opportunity, remnant vegetation. Could link all the way to the Barwon River through the Show Grounds and roadsides
Swan Bay Road	PC23	From Swan Bay north to remnant Sheoak Patch on Swan Bay Road	Ramsar site - migratory birds EPBC: Subtropical and Temperate Coastal Saltmarsh Swan Bay - Port Phillip Marine National Park Sheoak Woodland, remnant roadside vegetation
Grassy Point Road	PC24	Roadsides - Anderson, Manifold, Grassy Point Road	Grassy Woodland, wildflowers and native grasslands
Masons Creek	PC25	Masons Creek and tributaries flowing to Swan Bay - Port Phillip Marine National Park - from Drysdale Landfill	Ramsar site - migratory birds Swan Bay - Port Phillip Marine National Park, corridor restoration opportunity, remnant vegetation Centre of the Northern Bellarine
Yarram Creek South	PC26	Murk Ngubitj Yarram Yaluk along Yarram Creek to Swan Bay Swan Bay - Port Phillip Marine National Park	Ramsar site - migratory birds Murk Ngubitj Yarram Yaluk (new Barwon Water Nature Reserve), Yarram Creek headwaters, Swan Bay Swan Bay - Port Phillip Marine National Park, wedge-tailed eagles, corridor restoration opportunity
Moonahwarri to Swan Bay	PC27	Lake Victoria to Swan Bay - Port Phillip Marine National Park	Ramsar site - migratory birds EPBC: Subtropical and Temperate Coastal Saltmarsh, Hooded Plover Swan Bay - Port Phillip Marine National Park, Coastal Moonah Woodland
Deakin Biodiversity Restoration	RN1	Deakin Waurn Ponds Campus	habitat restoration across the Deakin Waurn Ponds Campus aligned to their Biodiversity Strategy
Batesford Quarry	RN2	Batesford Quarry	Restoration of the Batesford Quarry as part of the NWGGA
Corio Landfill	RN3	Old Landfill site adjoining Limeburner's Bay and Hovell's Creek with	restoration opportunities for wildlife
Drysdale Landfill	RN4	Extensive habitat restoration opportunity when landfill closes - aligned to a Master Plan	Extensive habitat restoration opportunity when landfill closes - aligned to a Master Plan
Sparrovale Wetlands Reserve - *Ngubitj yoorree*	RN5	Sparrovale Wetlands Reserve - *Ngubitj yoorree*	Extensive habitat restoration opportunity at Sparrovale Wetlands Reserve - *Ngubitj yoorree* aligned to the Master Plan
Brisbane Ranges and Hinterland	Z1	Brisbane Ranges National Park, Adjoining private land, Northern Upland dry Forests, Lynches Road Grassy Woodland	Mt Anakie, Scoria Cone Woodland, large old remnant trees,
Wurdi Youang	Z2	You Yangs, Wooloomanata Station, Ford Proving Grounds and associated private land to the north of the You Yang, Mt Rothwell, Little River Ripley Road/ Kirk Bridge Road Grasslands and Shrublands, Sharkeys Swamp and Bullock Woodland	You Yangs, Wooloomanata Station, Ford Proving Grounds and associated private land to the north of the You Yang, Mt Rothwell, Little River Ripley Road/ Kirk Bridge Road Grasslands and Shrublands, Sharkeys Swamp and Bullock Woodland
Avalon	Z3	Western Treatment Plant, Corio Grassland, Cheatam Saltworks - including Avalon Coast, Avalon Airport - south, Corio Landfill	Ramsar site - migratory birds EPBC: Subtropical and Temperate Coastal Saltmarsh, Orange-bellied Parrot
Moolapio	Z4	Botanic Gardens, Eastern Park and East Geelong Golf Course Moolap Saltworks and Point Henry	future Ramsar site - migratory birds EPBC: Subtropical and Temperate Coastal Saltmarsh, Grey Headed Flying Fox Native Grasslands
Point Richards	Z5	Portarlington Reserves and adjoining private land	EPBC: Subtropical and Temperate Coastal Saltmarsh, Orange-bellied Parrot, Growling Grass-frog, Australasian Bittern Red-capped plover breeding site Damp Sands Herb-rich Woodland, wetlands, threatened flora species (Geranium) Brown Quail, Birding Hotspot
Indented Head Woodland and Coast	Z6	Indented Head Woodland Nature Reserve, PV managed Salt Lagoon, adjoining City nature reserve and private land remnants	EPBC: Subtropical and Temperate Coastal Saltmarsh, Latham's Snipe large old remnant trees, Grassy Woodland, Coastal Moonah Woodland, Headland Scrub Red-capped plover breeding sites

BIOLINK NAME	BIOLINK NUMBER	DESCRIPTION	VALUES
			Point Richards Flora and Fauna Reserve, Portarlington Recreation Reserve
Swan Bay and surrounds	Z7	Edwards Point Wildlife Reserve Grassy Woodland remnants on private land and roadsides - Grassy Point Road and Anderson Road	Ramsar site - migratory birds EPBC: Subtropical and Temperate Coastal Saltmarsh, Orange-bellied Parrot Grassy Woodlands - Sheoak Woodlands
Moonahwarri	Z8	South East Bellarine Coast and Wetlands	EPBC: Subtropical and Temperate Coastal Saltmarsh, Hooded Plover State Significant Landscape, Migratory Birds, Coastal Moonah Woodland
Wallington Woodland	Z9	Grubb Road Woodlands, Mannerim Woodland Marcus Hill	EPBC: Swift Parrot
Ocean Grove Woodland	Z10	Ocean Grove Nature Reserve, Yellow Gum Reserve and associated Grassy Woodland remnants on private land Kingston Park and Surrounding Remnants	EPBC: Swift Parrot Grassy Woodland, large old remnant trees, wildflowers
Lake Connewarre Wetland System	Z11	Lake Connewarre Wetland System to Barwon River Estuary & Sparrovale Wetlands Reserve - *Ngubitj yoorree*	Ramsar site, migratory birds EPBC: Subtropical and Temperate Coastal Saltmarsh, Orange Bellied Parrot, Sharp-tailed Sandpiper, Growling Grass Frog, Yarra Pygmy Perch, Spiny Peppercress Sparrovale Wetlands Reserve - *Ngubitj yoorree*, nationally significant number of Sharp-tailed sandpipers (6000+) observed 2021, Brolgas
Breamlea	Z12	Breamlea Flora and Fauna Reserve, Karaf Wetland, Thompsons Creek Estuary,	EPBC: Subtropical and Temperate Coastal Saltmarsh, Hooded Plover migratory birds

BIOLINK AREA INFORMATION

Corridors

Biolinks for the Greater Geelong area were identified in collaboration with community and industry experts via a series of workshops between 2020 and 2024. These workshops included:

1. Three workshops to develop the Bellarine biolinks map on 21 February 2020, 31 July 2020 and 25 August 2020.

2. Two further workshops to develop biolinks for the rest of Greater Geelong on 16 March 2023 and 30 January 2024.

These biolinks are called 'Corridors' in the Plan for Nature.

Priority Corridors

During the consultation process, we have identified several key biolinks that will be a focus of the City's conservation programs going forward. These key biolinks are called 'Priority Corridors'.

Nodes

During community workshops, large patches of native vegetation and habitat were identified and recorded. If these were over 10 hectares in size they were initially identified as being a 'Biodiversity feature'. (Biodiversity features were included in the Bellarine Peninsula Distinctive Areas and Landscapes Statement of Planning Policy 2023). These habitat areas have been recorded across the whole municipality and have been called 'nodes' in the Plan for Nature. Most Corridors will connect to at least one Node.

Zones

There are several areas across Greater Geelong that support regionally significant biodiversity and are often much larger than 10 ha in size. These are the City's biodiversity hotspots, and are called 'zones' in the Plan for Nature. Zones often incorporate multiple Nodes and are linked by Priority Corridors.

References

Practical Ecology - Native Veg Mapping Private Land (Moderate to Very High Confidence only) - 2024

Sundew Ecological - Native Veg Mapping Private Land -2024 - 2025

Crown Land - Native Veg Aerial Photo Analysis

City of Greater Geelong - Native Vegetation - Reserves & Roadsides 2013 -2019

Native Veg Aerial Photo Analysis

Remnant vegetation mapping community/stakeholder workshops 2019

Biolink community/key stakeholder workshops March 2023 and January 2024

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