



Acknowledgement of Country

The City of Canada Bay acknowledges the Wangal clan, one of the 29 tribes of the Eora Nation, as the Traditional Custodians of this land. We pay our respects to Elders past, present, and emerging, and extend this respect to all Aboriginal and Torres Strait Islander people living in or visiting the City of Canada Bay.

This Biodiversity Action Plan recognises that the lands, waters, and ecosystems of Canada Bay are places of deep cultural, spiritual, and ecological significance. For tens of thousands of years, the Wangal people have cared for Country, sustaining diverse landscapes and the species that call them home. From the Grey-headed Flying-fox foraging in flowering eucalypts, to the Powerful Owl roosting in remnant Sydney Turpentine-Ironbark Forest, and the migratory Bar-tailed Godwit feeding along the tidal flats of Hen and Chicken Bay, these species remind us of the enduring connection between culture, biodiversity, and Country.

In acknowledging Country, we also recognise that biodiversity conservation is inseparable from cultural heritage. The foreshore, wetlands, and bushland of Canada Bay, home to species such as Eastern Bentwinged Bats, White-bellied Sea-eagles, and the delicate Coastal Saltmarsh plant communities, remain vital places of connection, learning, and identity for the Wangal people. By honouring their knowledge systems and custodianship, this Plan seeks to embed 'Caring for Country' principles into the way we conserve, restore, and celebrate our local natural environment.

The City of Canada Bay is committed to working alongside First Nations communities to ensure biodiversity actions respect cultural heritage, strengthen connections to Country, and help sustain both ecological and cultural resilience for future generations.



Guided tour of the Walk on Wangal Nature Trail with Koori Kinnections.

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What is Biodiversity?



Biodiversity (short for **biological diversity**) refers to the variety of all living organisms on Earth, including plants, animals, fungi, and microorganisms, as well as the ecosystems they form and the genetic differences within species. It exists at three main levels:



Genetic Diversity

The variation in genes within a species, which allows populations to adapt to changing environments.



Species Diversity

The variety of species within a particular habitat or ecosystem.



Ecosystem Diversity

The different types of ecosystems, such as forests, oceans, wetlands, and grasslands, which support various forms of life.



Why is Biodiversity important?

Biodiversity plays a vital role in maintaining ecological balance, supporting economic stability, preserving cultural heritage, and ensuring long-term environmental resilience. The City of Canada Bay is home to a variety of native species and ecosystems that provide essential services to the local community. However, these natural assets face significant threats, requiring conservation efforts to sustain their benefits for future generations.

Ecological Benefits

Biodiversity is essential for healthy, resilient ecosystems, supporting complex interdependent relationships between species across diverse environments, from wetlands and coastal saltmarshes to forests and grasslands. Native plants and animals provide critical ecosystem services, including pollination, water purification, soil fertility, nutrient cycling, and carbon sequestration. For example, mangroves and saltmarsh communities along foreshores act as carbon sinks, reducing the impacts of climate change by absorbing significant amounts of carbon dioxide. Native vegetation, such as Sydney Turpentine-Ironbark Forest and estuarine habitats, not only supports wildlife, including birds, mammals, and amphibians, but also enhances ecosystem balance and climate resilience. Green spaces and tree canopies reduce urban heat, improve air quality, and mitigate environmental stressors, making biodiversity conservation essential for helping ecosystems recover from increasing threats such as bushfires, floods, and climate change.

Economic and Agricultural Importance

Biodiversity is essential to a strong and sustainable economy, particularly in agriculture, fisheries, and tourism. Many crops, such as wheat and various fruits, depend on native pollinators like bees and birds, while the fishing industry relies on healthy marine biodiversity, including coastal saltmarsh communities that serve as nurseries for commercially important species like prawns and barramundi. Beyond food production, tree canopy coverage and proximity to green spaces have been shown to increase property values, while natural pest control, soil fertility, and water regulation help reduce dependence on costly artificial interventions in urban landscapes and community gardens. The loss of biodiversity would not only destabilise natural ecosystems but also jeopardise economic livelihoods, highlighting the need for conservation efforts that balance environmental health with economic resilience.

Cultural and Indigenous Connections

For First Nations peoples, biodiversity is deeply connected to cultural identity, traditions, and knowledge systems. Aboriginal and Torres Strait Islander communities have sustainably managed land and water for over 65,000 years, using fire management techniques and Traditional Ecological Knowledge (TEK) to maintain ecosystems. Many native species, such as bush tomato and kangaroo grass, are vital to Indigenous food, medicine, and cultural practices. In the City of Canada Bay, biodiversity holds particular significance for the Wangal people, with areas along the Parramatta River foreshore like Cabarita Park and Hen and Chicken Bay identified as important gathering places for food, materials, and spiritual connections to Country. Protecting biodiversity is not only about conservation but also about respecting and preserving Indigenous cultural heritage and recognizing traditional custodianship of the land. Incorporating traditional ecological knowledge into conservation efforts helps safeguard both natural and cultural heritage, strengthening connections between communities and the environment.

Threats and the Need for Conservation

The biodiversity in the City of Canada Bay faces numerous threats, including habitat loss due to urban development, pollution, invasive species, and climate change. Edge effects, such as light pollution, weed invasion, and habitat fragmentation, further endanger native species and disrupt ecological connectivity. Without intervention, these pressures could lead to declining species populations, reduced ecosystem function, and increased vulnerability to environmental shocks.

What can be done?

Protecting biodiversity requires a collaborative approach, involving governments, industries, communities, and individuals. Federal and State initiatives such as the Threatened Species Action Plan, Indigenous-led land management programs, and urban greening projects play a vital role in restoring habitats and enhancing ecological resilience. Within the City of Canada Bay, conservation efforts focus on sustainable land management, expanding green spaces, and protecting native flora and fauna.

Individuals can contribute by participating in habitat restoration, managing invasive species, reducing pollution, and engaging in community initiatives such as Backyards for Biodiversity, Bushcare, citizen science programs,

and wetland restoration projects. Urban planning and climate adaptation strategies, including tree canopy expansion and foreshore rehabilitation, further support biodiversity and ecosystem health.

Biodiversity is fundamental to Australia's environmental sustainability, economic stability, and cultural heritage. Its preservation ensures the long-term well-being of ecosystems, communities, and future generations. By integrating conservation principles into planning, policy, and daily practices, the City of Canada Bay can safeguard its unique biodiversity and build a resilient, thriving natural environment for the future.

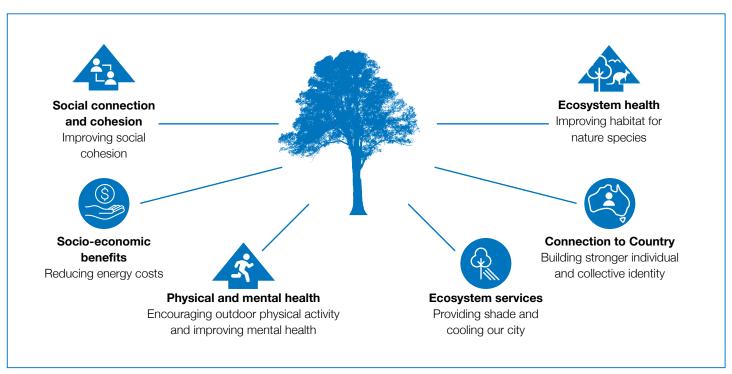


Figure 1. Potential benefits that nature can provide in Canada Bay, adapted from Nature Conservancy Australia.

Plan Framework

The City of Canada Bay Biodiversity Action Plan serves as an update and refresh of the 2019 Canada Bay Biodiversity Framework and Action Plan, incorporating new data and insights from the 2023–24 Flora and Fauna Survey. This updated plan reflects current biodiversity priorities and ensures that conservation efforts remain evidence-based, adaptive, and responsive to environmental changes, urban development pressures, and community needs.

The framework is structured around three interconnected themes, each addressing key biodiversity priorities:



Nature is Protected and Enhanced – Focusing on the preservation and restoration of natural areas, particularly Endangered Ecological Communities (EECs), through habitat restoration, invasive species and pollution control, and increasing native species diversity and tree canopy coverage.



Nature is Connected – Strengthening ecological networks to support wildlife movement and habitat connectivity by regenerating biodiversity corridors, restoring foreshore and riparian areas, and integrating First Nations knowledge to foster a deeper connection to Country.



Nature is Celebrated – Inspiring community engagement and stewardship through education, citizen science, volunteer programs, and local conservation initiatives, ensuring biodiversity is valued, protected, and enjoyed by the community.

By aligning with these themes, the Biodiversity Action Plan provides a clear and practical framework to guide planning, on-ground management, and community partnerships, ensuring the long-term protection and resilience of biodiversity in the City of Canada Bay.



Commitment to Biodiversity

Australia's Biodiversity Conservation Strategy 2010–2030 provides a national framework for conserving biodiversity. It recognises that human well-being relies on healthy ecosystems, which are increasingly under threat from habitat loss, invasive species, unsustainable use, altered water and fire regimes, and climate change. The Strategy warns that human actions have caused lasting harm, compromising nature's ability to support our needs. It calls for urgent, collective action to protect biodiversity before further decline occurs.

There are also several other policies, agreements and frameworks at a global level.

By observing these international, national, state and regional obligations, Council ensures biodiversity is preserved, enhanced, and integrated into urban planning and land management.

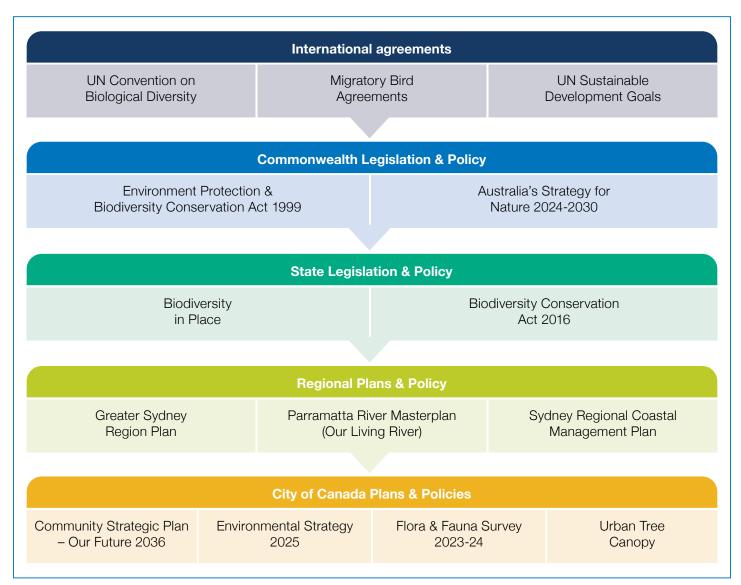


Figure 2. International, national, state and regional obligations.

Governance of the plan – Monitoring and Review

Governance

The Manager Sustainability and Waste is the owner of the plan and the Coordinator Environmental Sustainability will oversee the delivery of the plan. This role will involve coordinating projects with key stakeholders and managing the overall performance of the plan. The identified lead teams will implement the specific projects and secure necessary resources. Each action identifies the lead department responsible for its implementation and any supporting teams.

Funding

Funding for this plan will come from general revenue funds, grants and people resourcing. Each year projects will be listed in the operational plan for budgetary approval. Action priorities will be reviewed annually to ensure alignment with Council's strategic objectives and to ensure funding is allocated.

Reporting, Evaluation and Review

Each project will be reviewed, monitored and case studies produced to highlight key projects. The overall performance of the plan will be measured annually against the established targets and indicators. Ongoing improvement will be integrated into the plan. Progress will be monitored and reported through Council's current reporting mechanisms and a report on completed actions will occur in the annual report each year.

The Plan is intended to remain a flexible document, capable of responding to emerging data, and shifting priorities.

A formal review of the plan will occur in 5 years from the date of adoption.

Environmental Strategy

The City of Canada Bay's Environmental Strategy 2025 sets clear biodiversity objectives. This Biodiversity Action Plan aligns directly to the Environmental Strategy and supports delivery of the targets.

Biodiversity Targets



1. Increase native diversity

Increase native plant diversity and animal species within the LGA.



2. Enhance habitat connectivity

Improve habitat connectivity within identified biodiversity corridors by 2030.



3. Community participation

Increase community involvement in biodiversity care by 25% by 2030.



4. Green grid engagement

Achieve 15% participation of residents in Green Grid areas in the Backyards for Biodiversity program by 2030.

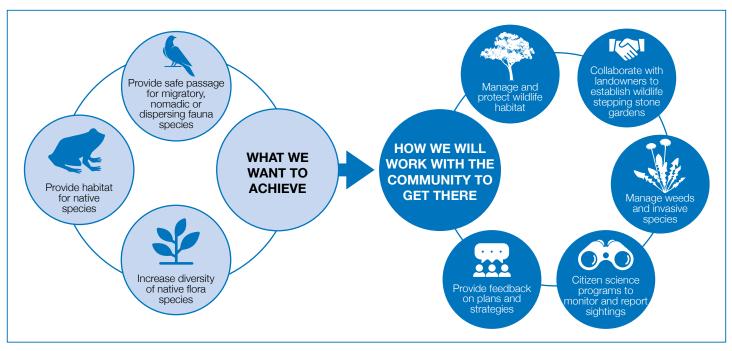


Figure 3. Community-led approaches to enhance and protect wildlife habitat and biodiversity.

How will we get there?

Achieving these targets requires clear goals supported by practical actions. The Environmental Strategy outlines three biodiversity goals which provide the framework for success, and this Biodiversity Action Plan translates them into on-ground outcomes.

A community connected to nature where individuals actively engage with and care for the natural environment.

This goal directly supports the participation targets by encouraging greater community involvement in caring for nature. Actions include expanding Bushcare, citizen science, and planting programs, alongside education campaigns and local events that inspire people of all ages. By creating opportunities for residents to restore habitats, monitor species, and learn about local ecosystems, we will grow active stewardship across the community. This engagement not only meets participation targets but also strengthens biodiversity by increasing native species diversity.

2. A well-connected and robust network of biodiversity corridors, supported by strong community partnerships and active participation in conservation programs.

This goal underpins the target of improving habitat connectivity by 2030. Actions such as regenerating foreshore and riparian areas, restoring bushland, managing invasive species, and partnering with landholders to create stepping-stone habitats will link fragmented landscapes. These efforts ensure that plants and animals can move across the City, sustain viable populations, and adapt to change. Building strong community partnerships around these corridors further embeds conservation into local practice and supports measurable ecological gains.

3. A community that values and draws on traditional 'Caring for Country' knowledge.

This goal ensures that biodiversity management is enriched by First Nations knowledge and cultural values, supporting both ecological and cultural resilience. Actions include cultural walks, interpretive signage, and the integration of Traditional Ecological Knowledge into restoration projects. By embedding these practices, the Plan honours cultural heritage while improving ecological outcomes. This approach also strengthens community participation by engaging more people in culturally informed conservation activities, directly contributing to our participation targets.

By linking targets, goals, and actions, the Biodiversity Action Plan ensures every initiative contributes to measurable outcomes. Actions deliver on goals, and goals provide the pathway to meeting the targets, together creating a city where biodiversity is not only protected and enhanced, but also deeply valued and celebrated.

Determining Biodiversity Significance in an Area

Biodiversity significance in an area is assessed based on several interrelated factors that influence the health, resilience, and ecological function of natural systems. The following categories outline the key determinants of biodiversity value in the City of Canada Bay.

1. Habitat Quality and Diversity

The availability and condition of habitat are fundamental to biodiversity significance. Key habitat features within the LGA include:

- Hollow-bearing trees and stags Essential nesting sites for birds and mammals.
- Waterways and foreshores Including ponds, dams, estuarine wetlands, and mangroves, which support aquatic and terrestrial species.
- Dense shrubs, marshes, and canopy trees Providing food, shelter, and breeding sites.
- Leaf litter and logs Critical for invertebrates, fungi, and small reptiles.
- Built structures (e.g., stormwater channels and bridges)
 Often serve as unexpected refuges for urban wildlife.

The size and connectivity of habitat patches also influence biodiversity. Larger habitat areas with minimal fragmentation support greater species diversity and more stable populations.

2. Green Infrastructure and Urban Biodiversity

Green infrastructure refers to networks of green spaces and natural systems that contribute to urban biodiversity. Examples in the LGA include:

- Street trees, parks, and residential gardens Providing stepping-stone habitats for pollinators and birds.
- Rooftop gardens and water-sensitive urban design (WSUD) – Enhancing habitat in densely developed areas.
- Corridors and ecological linkages Ensuring species movement and genetic exchange.

Fully functioning ecological communities with native species have higher biodiversity value than fragmented or modified landscapes.

3. Species Diversity and Conservation Status

Areas with high native species richness and threatened species are considered more significant for biodiversity. This includes:

- Presence of threatened species Listed under the NSW Biodiversity Conservation Act 2016 and the Environment Protection and Biodiversity Conservation (EPBC) Act 1999.
- Endangered Ecological Communities (EECs) Such as Sydney Turpentine-Ironbark Forest and Estuarine Swamp Oak Forest.
- Native vs. introduced species High numbers of introduced species (weeds, pest animals) reduce an area's biodiversity value.

4. Connectivity and Corridors

Wildlife corridors allow species to move across urban landscapes and maintain genetic diversity. These corridors:

- Link habitat patches through stepping-stone reserves, street trees, and waterways.
- Reduce the risk of local extinction by enabling recolonization after disturbances such as habitat loss or extreme weather events.
- Provide safe movement routes across fragmented urban environments.

5. Ecosystem Services and Climate Resilience

Ecosystem services provided by biodiverse areas include:

- Carbon sequestration Mangroves and wetlands store carbon and mitigate climate change.
- Urban cooling Tree canopies reduce heat island effects in built-up areas.
- Water filtration and erosion control Vegetated riparian zones improve water quality and prevent sedimentation.
- Pollination and pest control Native pollinators and predators contribute to ecosystem balance.

6. Threats and Management Needs

The biodiversity value of an area decreases with:

- Weed invasion and pest species (e.g., Noisy Miners outcompeting small birds).
- Habitat fragmentation and loss due to urban development.
- Pollution and edge effects such as light spill, rubbish dumping, and stormwater runoff.

Proper management strategies, such as bush regeneration, habitat restoration, and pollution control, help maintain biodiversity significance in urban areas like Canada Bay.

By integrating these factors into biodiversity assessments, the City of Canada Bay can ensure strategic conservation planning that prioritises ecological health, resilience, and sustainability.



Biodiversity in the City of Canada Bay



Open space and tree canopy



Overall land area 19.93km².

220ha of open space managed by Council (11% of the Local Government Area).

280,000 trees on public land.

Biodiversity

99 native fauna species.

270 native plant species.

24ha of Threatened Ecological Communities.



Parks and recreation

180 parks.

104 sporting fields.

2 golf courses.

2 swimming centres.

Foreshore



3 swimming sites.

1 splash site.



Figure 4. Biodiversity in the City of Canada Bay.

The City of Canada Bay is a highly urbanised, yet ecologically significant local government area (LGA) located along the southern banks of the Parramatta River. It encompasses 245 hectares of public open space across 169 parks, with 47 hectares zoned for environmental conservation, ensuring the protection and enhancement of native biodiversity.

Historically, the Canada Bay region was covered by Sydney Turpentine-Ironbark Forest, Coastal Saltmarsh, and extensive mangrove and swamp oak forests along the foreshore. These ecosystems supported a diverse range of native wildlife, including small woodland birds, marsupials, and aquatic species thriving in the tidal wetlands. However, since European settlement, large areas of vegetation have been cleared for agriculture, industry, and urban development, leading to habitat loss and a decline in species diversity. Despite these changes, remnant patches of native vegetation and ecological restoration efforts continue to provide critical habitat for wildlife today.

Despite ongoing urban pressures, the City of Canada Bay maintains key ecological communities that support diverse flora and fauna. These include Sydney Turpentine-Ironbark Forest, Estuarine Swamp Oak Forest, Estuarine Saltmarsh, and Grey Mangrove-River Mangrove Forest, some of which are classified as Threatened Ecological Communities (TECs) under NSW and Federal legislation. These ecosystems provide essential habitat for a variety of native species, including the Eastern Osprey, Powerful Owl, and the migratory Bar-tailed Godwit.

The regional connectivity of Canada Bay's natural areas is a defining feature of its biodiversity. The LGA plays a crucial role in linking habitats along the Parramatta River and extending into Sydney Olympic Park, providing corridors for wildlife movement and migration. Foreshore reserves and vegetated riparian zones act as stepping stones for birds, bats, and other fauna, ensuring ecological resilience in an increasingly urban landscape.

Recent flora and fauna surveys conducted between 2023 and 2024 have highlighted the area's ecological significance. However, urbanisation poses challenges, including habitat fragmentation, invasive species, and increased human activity in sensitive areas. To mitigate these threats, the City of Canada Bay is actively implementing biodiversity conservation strategies, such as habitat restoration, improved ecological connectivity, wetland management, and community engagement in conservation efforts.

As the City continues to evolve, balancing urban development with biodiversity conservation remains a priority. The protection and enhancement of Canada Bay's ecological assets not only support native species but also contribute to the overall environmental health and well-being of the community.

Wetlands & Waterways

A network of wetlands and waterways play a crucial role in supporting biodiversity, improving water quality, and enhancing ecological connectivity across the City's urban landscape. These aquatic ecosystems include mangrove forests, saltmarshes, seagrass meadows, and estuarine environments, which provide essential habitat for a variety of marine and terrestrial species.

Parramatta River Foreshore

The Parramatta River is the most significant waterway in the City of Canada Bay, forming its northern boundary. This tidal river is a vital ecological corridor that connects various urban parks and green spaces along its foreshore. Historically, the river and its estuarine wetlands supported a diverse array of flora and fauna, including mangroves, saltmarshes, and seagrass beds. Today, while the river has been modified by urban development, it continues to be an important ecosystem for native fish species, migratory birds, and estuarine vegetation.

The river is also home to Sydney Turpentine-Ironbark Forest, an endangered ecological community that exists in patches along the foreshore. This vegetation provides habitat for native birds and invertebrates while stabilizing the riverbanks. Despite its ecological importance, the Parramatta River faces multiple threats, including pollution from stormwater runoff, sedimentation, and habitat fragmentation due to urban development. Conservation programs such as the Our Living River Project aim to restore the river's ecological health and improve water quality to make it swimmable by 2025.

Iron Cove Creek

Iron Cove Creek, also known as Dobroyd Canal, is a tributary of the Parramatta River that flows through the City of Canada Bay before emptying into Iron Cove. Historically, it was a natural waterway lined with wetland vegetation, but it has been heavily modified over the years, with much of it now channelised in concrete. Despite this, efforts are being made to restore its ecological function by reintroducing native vegetation and improving water quality.

The creek supports remnant patches of mangroves and saltmarsh, which provide habitat for small fish, crabs, and migratory birds. It is also an important urban waterway for stormwater drainage. However, pollution from surrounding residential and commercial areas has led to water quality degradation. Rehabilitation efforts include stormwater filtration projects, revegetation initiatives, and improved riparian zone management.

Powells Creek and Badu Mangroves

Powells Creek is another major waterway within the City of Canada Bay, flowing from Strathfield through Concord West before reaching the Parramatta River. This waterway is connected to Badu Mangroves, a significant wetland ecosystem located in Sydney Olympic Park. These mangroves serve as an important breeding and feeding ground for various fish species, crustaceans, and birdlife.

Badu Mangroves form one of the largest remaining stands of Grey Mangroves (Avicennia marina) in the Sydney region. These trees play a crucial role in stabilizing the shoreline, filtering pollutants from stormwater runoff, and providing shelter for juvenile fish. The wetland is also home to important bird species such as the Bar-tailed Godwit, a migratory shorebird protected under international agreements. However, threats such as boat traffic, illegal dumping, and nutrient runoff from urban areas pose ongoing challenges to the health of this ecosystem.

Saltwater Creek and Massey Park Canal

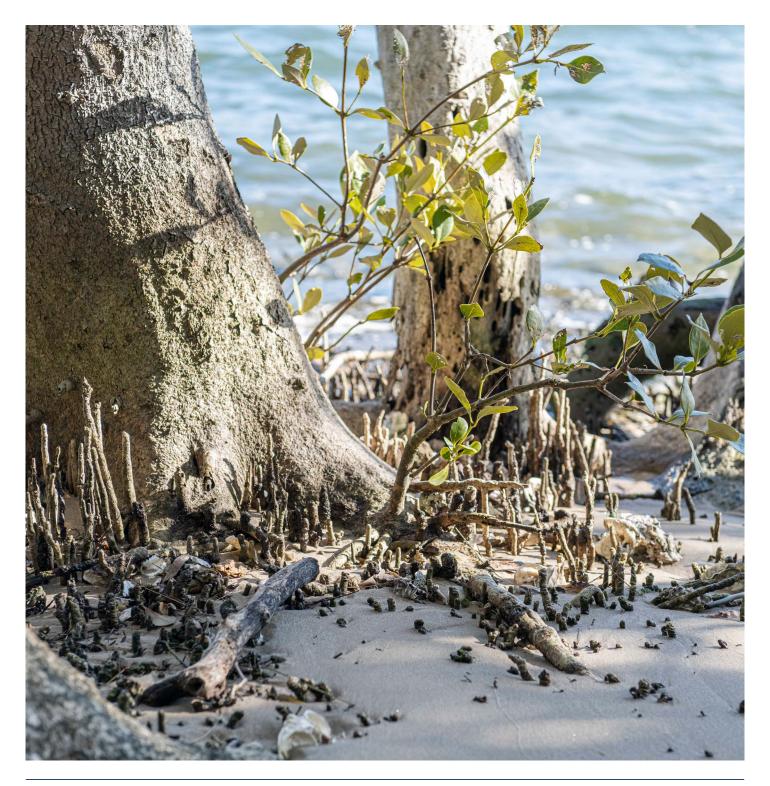
Saltwater Creek is a smaller but ecologically important waterway that flows into Exile Bay near Massey Park. This creek supports remnant patches of saltmarsh, an endangered ecological community that is vital for coastal biodiversity. Saltmarshes act as natural buffers, protecting against coastal erosion and providing habitat for fish and bird species.

Connected to Saltwater Creek is Massey Park Canal, a tidal estuary that serves as a transition zone between freshwater and marine environments. Seagrass meadows have been recorded in this area, providing an essential food source and habitat for marine life. However, urban development and changes in hydrology have led to sediment buildup and pollution, affecting the health of both the creek and canal. Restoration projects aim to improve tidal flow, enhance wetland vegetation, and reduce human disturbances in these areas.

Exile Bay and Seagrass Meadows

Exile Bay, located along the Parramatta River, is home to one of the most ecologically significant seagrass meadows in the City of Canada Bay. These underwater plants provide habitat for fish, invertebrates, and other marine organisms while improving water quality by stabilising sediments and absorbing nutrients.

Seagrass meadows are particularly vulnerable to threats such as dredging, boat propeller damage, and excessive nutrient runoff. Declines in seagrass cover have been observed in recent years, prompting conservation efforts to monitor and restore these vital ecosystems. Strategies include restricting boat access to sensitive areas, improving stormwater management, and conducting habitat restoration initiatives in partnership with local environmental groups.



Terrestrial Biodiversity

Native Vegetation and Habitat Types

The remaining natural areas within the City retain significant pockets of terrestrial biodiversity consisting of remnant native vegetation, urban forests, and scattered green spaces. The terrestrial ecosystem in the region is shaped by a mix of pre-existing natural environments and human-altered landscapes, supporting a variety of plant communities, birds, mammals, reptiles, and invertebrates.

These areas play a crucial role in supporting biodiversity by providing shelter, food, and breeding grounds for wildlife. The key vegetation communities in the area include Sydney Turpentine-Ironbark Forest, Coastal Saltmarsh, Swamp Oak Floodplain Forest, and Swamp Sclerophyll Forest on Coastal Floodplains. These vegetation types are classified as Endangered Ecological Communities (EEC) under State and Federal legislation.

The Sydney Turpentine-Ironbark Forest, once widespread across the Sydney region, is now critically endangered. Small remnants of this forest are found in reserves such as Dame Eadith Walker Estate and Arthur Walker Reserve. This ecosystem provides habitat for native birds, insects, and small mammals, although its long-term survival is threatened by fragmentation and invasive species.

Canada Bay's urban bushland and parks also contain patches of native vegetation that contribute to habitat connectivity. While much of the original bushland has been cleared, efforts have been made to restore these green spaces with indigenous plant species. Areas such as Queen Elizabeth Park, Cintra Park, and Yaralla Estate support a mix of native and introduced flora, with active bush regeneration projects helping to maintain biodiversity.

Urban gardens, streetscapes, and community parks play an important role in the broader ecosystem, providing 'stepping-stone' habitats that allow species to move between larger green spaces. While these areas may contain a mix of exotic and native plants, they still support pollinators such as bees and butterflies, as well as common bird species.

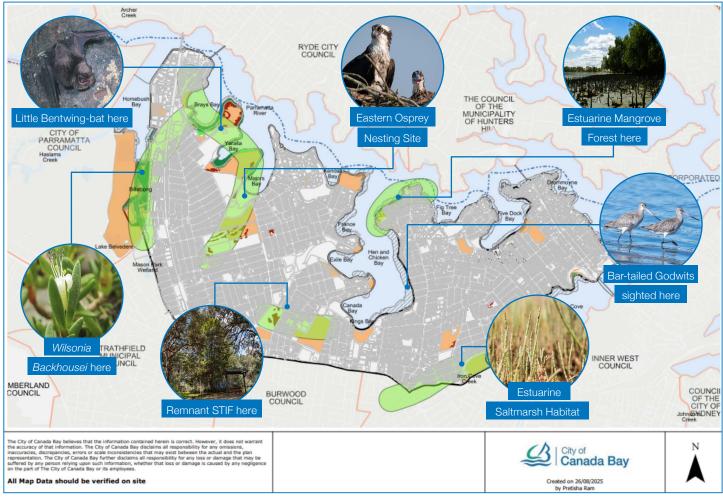


Figure 5. Map of the Local Government Area showing key biodiversity features and the locations of unique and notable species.

Fauna

Despite the pressures of urbanisation, the City of Canada Bay remains home to a variety of native wildlife. The 2023-24 Flora & Fauna Survey documented 111 vertebrate species, with birds making up the majority of records. However, while overall species richness remains relatively stable compared to past surveys, there are notable changes in habitat use and species distribution.

Key observations:

- 84 bird species
- 7 reptile species
- 17 mammal species
- 3 amphibian species

The LGA is a key habitat for several threatened species, including:

Fauna Species	Location	Habitat
Eastern Bent-winged Bat (Miniopterus orianae oceanensis)	Detected via ultrasonic bat call recordings in Yaralla Estate, Queen Elizabeth Park, and Brays Bay.	Roosts in caves, tunnels, and old buildings; forages over water bodies and open spaces.
Little Bent-winged Bat (Miniopterus australis)	Recorded at Majors Bay Reserve, Concord Golf Course, and Quarantine Reserve.	Prefers dense vegetation near water; roosts in tree hollows and buildings.
Large-footed Myotis (Myotis macropus)	Found near Powells Creek, Hen and Chicken Bay, and Iron Cove.	Forages over water, particularly in riparian zones and mangrove edges.
Grey-headed Flying-fox (Pteropus polycephalies)	Frequently observed at Yaralla Estate, Queen Elizabeth Park, Drummoyne Park, and Brett Park.	Roosts in large colonies in trees, prefers areas with flowering eucalypts and fruiting trees.
Eastern Osprey (Pandion cristatus)	Nesting recorded at Majors Bay Reserve, also seen at Cabarita Park, Five Dock Bay, and Brays Bay.	Coastal and estuarine areas; prefers tall trees or artificial platforms for nesting.
Latham's Snipe (Gallinago hardwickii)	Observed in Hen and Chicken Bay, Brays Bay, and Quarantine Reserve.	Wetlands and mudflats; migratory species using the area during its annual journey.
Australian Pied Oystercatcher (Haematopus longirostris)	Recorded on mudflats at Hen and Chicken Bay, Brays Bay, and Iron Cove.	Sandy beaches, intertidal mudflats, and estuarine areas.
Powerful Owl (Ninox strenua)	Detected at Yaralla Estate, Queen Elizabeth Park, and Majors Bay Reserve.	Prefers large trees with dense foliage for roosting and hunting nocturnal prey.
White-bellied Sea-eagle (Haliaeetus leucogaster)	Frequently seen at Hen and Chicken Bay, Majors Bay, and Iron Cove.	Coastal and estuarine areas; nests in large trees near water.

Migratory shorebird populations, particularly around Hen and Chicken Bay, have declined, with Bar-tailed Godwits and Latham's Snipe now mostly confined to the eastern shore. Previously key sites like Prince Edward Park and Rodd Point see fewer wading birds, likely due to human activity, dog disturbance, and sediment changes. Expanding mangroves may also reduce available foraging habitat. Seasonal dog-exclusion zones and artificial hightide roosts could help support these species.

Despite high bird diversity, habitat quality determines distribution. Superb Fairy-wrens and Eastern Spinebills were mostly found in Yaralla Estate and Queen Elizabeth Park, where shrub cover remains. In contrast, Noisy Miners, an aggressive native species, dominate many parks, reducing small bird diversity. The lack of understory vegetation further limits habitat for smaller species, while adaptable birds like Magpies, Cockatoos, and Rainbow Lorikeets thrive in open parklands.

The survey highlighted the importance of microbats, with Eastern Bent-winged Bats, Little Bent-winged Bats, and Large-footed Myotis recorded across the LGA. The Large-footed Myotis, which hunts over water, was found at Powells Creek and Hen and Chicken Bay, emphasising the need to protect riparian zones. Grey-headed Flying-foxes were common in urban parks and foreshore reserves, feeding on flowering trees.

While Brushtail and Ringtail Possums were present in bushland reserves, the widespread presence of feral foxes and cats threatens small mammals, reptiles, and groundnesting birds.

Reptiles and amphibians were scarce, likely due to habitat fragmentation and urban pressures. Only three frog species—Common Eastern Froglet, Striped Marsh Frog, and Peron's Tree Frog—were recorded in Brays Bay and Powell's Creek wetlands. Just seven reptile species were documented, including Eastern Water Skinks and Blue-tongue Lizards, mainly in golf courses, backyards, and vegetated areas. Their low diversity suggests urban development, habitat loss, and predation by foxes and cats are key threats.

Flora

With 361 native plant species recorded since 2000, the City is home to a diverse and ecologically valuable flora species. The 2023-24 Flora & Fauna Survey identified 270 native species, reinforcing the area's role as an important ecological asset within Greater Sydney.

Among the recorded flora, several species are classified as threatened under NSW and Commonwealth legislation, underscoring the need for targeted protection and restoration initiatives:

Flora Species	Location	Status
Narrow-leafed Wilsonia (Wilsonia backhousei)	Historically recorded at Brays Bay foreshore (Lovedale Place) in 2008, this species has not been relocated in recent surveys. Given the high ecological potential of similar foreshore habitats, restoration efforts could enhance its chances of recolonization.	Vulnerable (NSW)
Black-eyed Susan (Tetratheca juncea)	Last recorded in 1884, this species has likely disappeared from the LGA, emphasizing the historical biodiversity loss and the importance of preserving existing native vegetation.	Vulnerable (NSW & Commonwealth)
Pimelea curviflora var. curviflora	This species, last recorded in 1907, is presumed locally extinct. Its loss highlights the critical need for habitat protection and biodiversity-sensitive urban planning.	Vulnerable (NSW & Commonwealth)

Additionally, 86 other species are predicted or known to occur in the LGA, warranting further monitoring and conservation efforts.

Endangered Ecological Communities: Sydney Turpentine-Ironbark Forest

A key ecological feature of the LGA is the Sydney Turpentine-Ironbark Forest (STIF), classified as an Endangered Ecological Community (EEC) under NSW legislation. Remnants of this once-dominant forest are found in Dame Eadith Walker Reserve and Queen Elizabeth Park, providing essential habitat for native fauna and contributing to the region's environmental resilience.

The preservation and enhancement of STIF is a priority for maintaining biodiversity, improving urban green spaces, and ensuring long-term ecological sustainability.

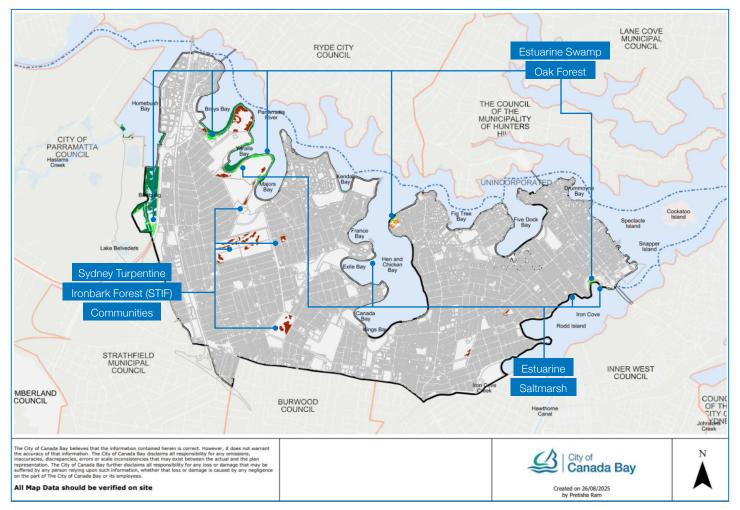


Figure 6. Vegetation Communities.

Map illustrating the distribution of Endangered Ecological Communities (EECs), including Sydney Turpentine-Ironbark Forest, Estuarine Swamp Oak Forest, and Estuarine Saltmarsh, within the Local Government Area (LGA).

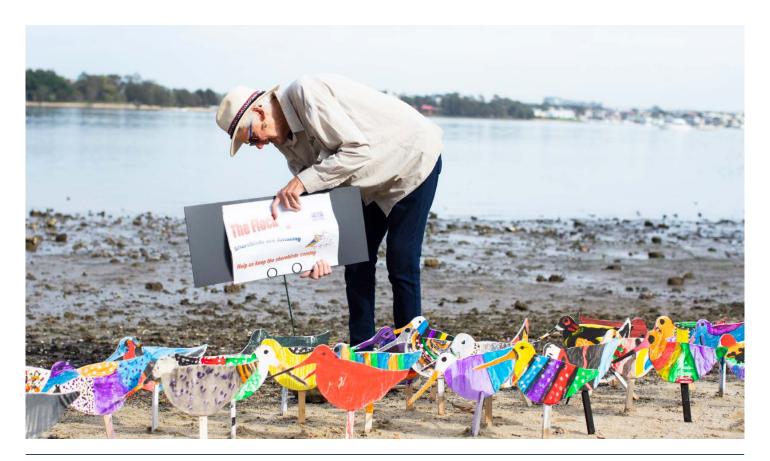
Biodiversity Management in the City of Canada Bay

Over the years, the City of Canada Bay has implemented various biodiversity management practices to protect and restore its natural environment. Past efforts have included bush regeneration projects, weed control programs, and community-driven conservation initiatives such as Mind Our Mangroves and Help Protect the Bar-tailed Godwits. The Council has also undertaken revegetation projects in parks and reserves, focusing on restoring native plant communities and improving habitat for local wildlife.

In recent years, ongoing biodiversity management has expanded to include wetland restoration, the establishment of biodiversity corridors, and improved stormwater management to reduce pollution in local waterways. Past and ongoing biodiversity management activities are summarised in the table below.

Program/Project	Description	Duration	Team
Bushcare group	Council supports volunteer bushcare groups, these groups participate in weeding, planting, and litter collection across 17 sites like Queen Elizabeth Park, Brett Park, Sisters Bay, Majors Bay Reserve and Edwards Park. Occasionally environmental education days are delivered to expand volunteers' skills and knowledge of the local area.	Ongoing	Urban Ecology
National Tree Day and plant giveaways	Council promotes National Tree Day by offering free native trees, shrubs and ground cover to local residents to assist in increasing native vegetation on private land.	Twice a year	Urban Ecology & Sustainability
Workshops and community planting	Council engages the community through hands-on planting days and a variety workshops such as bee and insect hotels, native gardening, bush tucker, bird ID, etc empowering residents to support local ecosystems and conservation efforts.	Ongoing	Sustainability
Street tree planting	Planted more than 4,800 trees to enhance urban biodiversity and improve air quality in the last 5 years.	Ongoing	Urban Ecology
Love Your Place and Community Clean Ups	Council delivers two community clean up events each year and supports 19 Love Your Place community clean up groups.	Ongoing	Sustainability
McIlwaine Park	McIlwaine Park's design reconnects the community to Brays Bay while supporting future swimming access. A reimagined seawall with rockpools, salt marsh, and habitat tiles enhances biodiversity and river health.	Ongoing	Open Space
Walk on Wangal Nature Trail	A collaborative project with local schools, community groups and residents, the Walk on Wangal Nature Trail enhances local biodiversity with over 3,000 native plants from 60 species, habitat gabions, bee hotels, and nest boxes. It strengthens foreshore ecological corridors while fostering community connection to nature and culture through signage and citizen science.	Ongoing	Sustainability Open Space

Program/Project	Description	Duration	Team
Protecting the Bar-tailed Godwits & Coastal Saltmarsh	A community campaign aimed at raising awareness about the plight of migratory shorebirds, such as the Bar-tailed Godwit, through education, enforcement of offleash dog regulations in hotspot parks, and restoration of Coastal Saltmarsh habitats. As a result, the project achieved a 35% reduction in off-leash dogs at key sites and a 33% improvement in Coastal Saltmarsh health at protected locations.	2020-2023	Urban Ecology & Sustainability
Mind Our Mangroves	Mind Our Mangroves community education program reduced mangrove vandalism by 37%.	2017-2018	Urban Ecology & Sustainability
Backyards for Biodiversity	The Backyards for Biodiversity program supports community members to create habitat stepping stones, or an area of refuge, in residential and school gardens for local wildlife.	Ongoing	Sustainability
Coastal Saltmarsh Offset Planting along the Bay Run	To help provide food and habitat for local wildlife, improve water quality, reduce erosion and capture carbon, 700sqm of coastal saltmarsh were planted along the Bay Run as part of the Bay Run seawall renewal project.	2021	Strategic Assets Services & Innovation
Drummoyne Wharf Seawall	Installation of 3D-printed reef tiles along Menzies Reserve seawall to create intertidal habitats, enhancing marine biodiversity by providing shelter, food sources, and water retention for species like mussels, oysters, and fish.	2020	Strategic Assets Services & Innovation



Guiding Principles



The guiding principles of the Biodiversity Action Plan align with the key themes of Nature is Protected and Enhanced, Nature is Connected, and Nature is Celebrated as follows:



Nature is Protected and Enhanced

This theme focuses on preserving and improving the condition of existing natural areas with focus on sites with EECs. It aligns with the following principles:

- Ecosystem Protection and Enhancement Conserving and restoring remnant vegetation, wetlands, and threatened ecological communities.
- Adaptive Management and Scientific Monitoring Using ongoing data collection to track biodiversity trends and refine conservation strategies.
- Habitat and Land Management Maintaining and restoring publicly owned green spaces, tree canopies, foreshores, and priority wildlife habitats.
- Invasive Species and Pollution Control Managing priority weeds and pests while reducing litter pollution to protect native ecosystems.
- Biodiversity Enhancement Increasing native species diversity and expanding tree canopy coverage for ecological resilience.
- Collaborative Conservation Partnering with major landowners and community groups to improve biodiversity management and ecological outcomes.
- Strengthening Planning Controls Safeguarding native vegetation, waterways, and canopy trees through enhanced planning policies.
- Foreshore and Riparian Revegetation Stabilising waterways, improving water quality, and increasing habitat availability for native wildlife.



Nature is Connected

This theme emphasises strengthening ecological networks to support wildlife movement and habitat connectivity. It aligns with:

- Regenerating Biodiversity Corridors Expanding Council's habitat restoration program to reinforce tree canopies, wetlands, and bushland connectivity.
- Embracing First Nations' Connection to Country
 Engaging with First Nations' values and knowledge to foster a deeper cultural and environmental connection.

- Climate Resilience and Habitat Adaptation –
 Enhancing habitat connectivity to support species in adapting to climate change.
- Mapping and Protecting Biodiversity
 Corridors Identifying and securing buffers around
 Endangered Ecological Communities in Council's
 planning instruments.



Nature is Celebrated

This theme highlights the importance of community involvement, education, and appreciation of local biodiversity. It aligns with:

- Community Engagement and Stewardship Expand community participation in volunteer programs (eg. Bushcare, Love Your Place, etc), citizen science and environmental education and restoration initiatives.
- Funding Community Initiatives Supporting grassroots environmental projects through Council's Environmental Grants program.
- Activating Green Spaces Improving trails, signage, and recreational spaces to encourage nature appreciation and outdoor activities.
- Wildlife and Flora Education Enhancing community understanding of local biodiversity through engagement programs and public awareness campaigns.
- Encouraging Backyard Conservation Inspiring residents to actively participate in Backyards for Biodiversity and local conservation projects.

By integrating these themes, the City of Canada Bay's Biodiversity Action Plan ensures that nature is protected, interconnected, and celebrated, supporting both ecological sustainability and community appreciation for the natural environment.

Biodiversity Priorities



Priority areas

This Action Plan identifies several key priority areas for conservation, habitat restoration, and environmental management. These priority actions aim to protect, restore, and enhance biodiversity while addressing urban pressures and community engagement.

1. Native Vegetation Protection and Restoration



- Habitat Conservation: Actively restore
 Threatened Ecological Communities (TECs) such
 as Sydney Turpentine-Ironbark Forest and Coastal
 Saltmarsh through bush regeneration, revegetation
 with locally sourced plants, and ecological burns.
- Weed and Pest Management: Implement targeted weed control programs in bushland remnants, stage the removal of invasive species, and manage pest animals such as foxes and rats.
- Land Management Plans: Develop Plans of Management for reserves, including measures to protect vegetation, limit urban encroachment, and control human impact.

2. Enhancing Corridors and Connectivity



- Biodiversity Corridors: Strengthen habitat linkages, particularly along the Parramatta River, Sydney Olympic Park, and key reserves like Queen Elizabeth Park and Yaralla Estate.
- Foreshore and Riparian Vegetation: Stabilise waterways through native plantings, wetland restoration, and erosion control, ensuring better water quality and wildlife connectivity.
- Mapping and Planning: Incorporate biodiversity corridors into planning instruments (Local Environmental Plan and Development Control Plan) to safeguard ecological connectivity.

3. Waterways and Foreshore Restoration



- Water Quality Monitoring: Establish monitoring programs at key sites such as Saltwater Creek, Powell's Creek, and Majors Bay, in partnership with StreamWatch and Sydney Water.
- Coastal Habitat Protection: Protect and enhance mangroves, mudflats, and saltmarsh ecosystems, which are vital for migratory shorebirds and aquatic species.
- Climate Resilience Measures: Address sea level rise impacts by creating space for wetlands to migrate inland and implement water-sensitive urban design solutions.

4. Public Space and Urban Habitat Management



- Tree Canopy Expansion: Increase tree cover and enhance urban greening efforts to support biodiversity and reduce urban heat island effects.
- Wildlife Habitat Features: Install and monitor nest boxes, fallen logs, and shrub layers to support native fauna.
- Pet and Human Impact Management: Restrict access to sensitive areas, establish dog exclusion zones in shorebird habitats, and educate residents on responsible pet ownership.

5. Community Engagement and Education



- Bushcare and Volunteer Programs: Expand Bushcare and Love Your Place initiatives, engaging more community members in conservation.
- **Biodiversity Education:** Conduct awareness campaigns on topics such as shorebird protection, native gardening, and the importance of wetlands.
- **Green Grants and Incentives:** Establish funding programs for private landholders, schools, and community groups to support local biodiversity conservation projects.

Priority species for planting

Priority native species for planting have been identified to enhance biodiversity, restore habitat corridors, and improve ecological resilience. The recommended selection of species is based on habitat needs, endangered ecological communities (EECs), and suitability for urban environments.

1. Trees (Canopy and Mid-Storey Species)



These species provide essential habitat for birds, insects, and mammals while contributing to urban cooling and carbon sequestration.

- Acacia parramattensis (Parramatta Green Wattle) Attracts a wide variety of fauna, thrives on shale soils.
- Allocasuarina torulosa (Forest Oak) A long-lived tree providing habitat and food for native wildlife.
- Angophora costata (Sydney Red Gum) Common on sandy or clay soils, supports pollinators.
- Angophora floribunda (Rough Barked Apple) Common along riverbanks, offers excellent shade and habitat.
- Eucalyptus acmenoides (White Mahogany) Suitable for heavy soils, supports a wide range of fauna.
- Eucalyptus paniculata (Grey Ironbark) Provides essential habitat for hollow-nesting species.
- Eucalyptus resinifera (Red Mahogany) Preferred by nectar-feeding birds and insects.
- Syncarpia glomulifera (*Turpentine*) A key species in Sydney Turpentine-Ironbark Forest.

2. Shrubs (Understorey Vegetation for Habitat Support)



Shrubs provide food, shelter, and nesting sites, particularly for small native birds and pollinators.

- Bursaria spinosa (Blackthorn) A spiky shrub that provides protection for small birds.
- Daviesia ulicifolia (Native Gorse Pea) A small shrub with spiny foliage, ideal for bird habitat.
- Indigofera australis (Native Indigo) A flowering shrub supporting native pollinators.
- Kunzea ambigua (Tick Bush) Produces nectar-rich flowers, attracting bees and birds.
- Melaleuca thymifolia (Thyme-leaved Paperbark) Supports wetland and riparian environments.
- Dillwynia and Pultenaea species (Egg and Bacon Peas) Beneficial for insect pollinators.

3. Groundcover and Wetland Plants



These species help stabilize soil, prevent erosion, and support local fauna in wetland and foreshore areas.

- Baumea rubiginosa (Bare Twig Rush) Ideal for planting around ponds and wetlands.
- Ficinia nodosa (Knobby Club Rush) Thrives in saltwater margins and stabilises estuarine areas.
- Juncus kraussii (Sea Rush) Important for saltmarsh restoration.
- Sporobolus virginicus (Marine Couch) A salt-resistant grass for stabilising sandy areas.
- Suaeda australis (Seablite) An edible plant that supports estuarine ecosystems.

4. Climbing Plants & Vines



Climbers contribute to vertical greening, providing habitat for insects and birds.

- Kennedia rubicunda (Dusky Coral Pea) A fast-growing, scrambling vine.
- Pandorea pandorana (Wonga Wonga Vine) Produces tubular flowers that attract pollinators.

5. Coastal and Riparian Species



These species are critical for stabilising foreshore areas and estuarine ecosystems, particularly around the Parramatta River.

- Casuarina glauca (Swamp Oak) Forms dense stands along riverbanks.
- Aegiceras corniculatum (River Mangrove) Supports salt-tolerant ecosystems.
- Avicennia marina (Grey Mangrove) Provides crucial habitat for fish and invertebrates.

Key Considerations for Planting

- Avoiding invasive species: The Noisy Miner (aggressive native bird) is known to thrive in areas with Grevillea and Callistemon species, so these should be avoided in bird habitat restoration efforts.
- Targeting EECs: Species selection should match the original vegetation communities, such as Sydney Turpentine-Ironbark Forest and Estuarine Swamp Oak Forest.
- Encouraging private native planting: Community education and incentives, such as plant giveaways, can promote native species in home gardens.

By prioritising these native species, the City of Canada Bay aims to restore biodiversity corridors, enhance ecological resilience, and support native fauna across urban and natural landscapes.



Priority habitat

Priority habitats are classified based on their ecological value, vulnerability to threats, and strategic importance. To enhance biodiversity and support local wildlife in our natural spaces, supplementary habitat features such as logs, species-specific nest boxes, and water features with fringing vegetation can be considered and incorporated. In highly sensitive areas, protective fencing and educational signage should be installed to minimise disturbance and promote public awareness of conservation efforts.

1. Critical and Significant Habitat Areas



These areas have been identified as having the **highest conservation value** and require urgent management actions:

- Sydney Turpentine-Ironbark Forest (STIF) –
 A Threatened Ecological Community (TEC), requiring active bush regeneration, weed control, and revegetation with locally sourced native species.
- Estuarine Saltmarsh and Mangroves –
 Key areas along Hen & Chicken Bay, Rodd
 Point, and Brays Bay require protection from
 encroachment, stormwater pollution management,
 and foreshore restoration.
- Foreshore and Wetland Ecosystems Highpriority areas include Powells Creek Reserve, Majors Bay Reserve, and Homebush Bay, which require coastal habitat restoration and pollution control.
- Riparian and Urban Waterways Saltwater Creek, Powell's Creek, and smaller tributaries need stormwater filtration, erosion control, and habitat rehabilitation to improve water quality and aquatic biodiversity.

2. Priority Connectivity Areas



These areas serve as critical ecological corridors, ensuring habitat connectivity and facilitating wildlife movement between reserves:

- Sydney Olympic Park Rhodes (Very High Priority)

 Includes Sydney Olympic Park, Powells Creek
 Reserve, and Railway corridor land, linking urban green spaces with regional biodiversity corridors.
- Concord West Majors Bay (Very High Priority)
 Includes McIlwaine Park, Brays Bay Reserve,
 Rhodes Park, Arthur Walker Reserve, Yaralla, and
 Dame Eadith Walker Estate, supporting habitat for shorebirds and urban wildlife.
- Abbotsford Point Quarantine Reserve (Very High Priority) – A crucial foreshore habitat and bushland restoration area.
- Iron Cove Rodd Point (Very High Priority) Timbrell Park, Croker Park, and Half Moon Bay, forming a coastal wildlife corridor.

3. Urban Biodiversity and Public Space Reserves



Urban green spaces and reserves play a key role in biodiversity conservation, providing steppingstone habitats:

- Bay Run (Brett Park and Montague Park) –
 High-priority fauna habitat restoration areas within
 a highly frequented public space.
- Queen Elizabeth Park, St Luke's Park, and Cabarita Park – Targeted for urban tree canopy expansion, understorey planting, and habitat enhancement.
- Rhodes Park and Five Dock Park Identified for native vegetation restoration and improving recreational design to minimize environmental impact.

4. Threatened and Endangered Species Habitats



These areas are vital for supporting threatened flora and fauna and require specific conservation measures:

- Migratory Shorebird Habitat Hen & Chicken Bay, Rodd Point, and Prince Edward Park require access restrictions, dog exclusion zones, and habitat protection measures.
- Seagrass and Mudflat Conservation Protecting intertidal zones along the Parramatta River to support aquatic biodiversity.
- Old-Growth Trees and Artificial Nesting Sites

 Retaining stagged trees, fallen logs, and artificial nest boxes for hollow-dependent species such as Powerful Owls and microbats.

Priority weeds

The introduction of the Biosecurity Act 2015 and Biosecurity Regulation 2017 established the term priority weed. Priority weeds are weeds that pose a biosecurity risk to the environment, community and economy. If left unmanaged, these weeds can have detrimental impacts on the environment, native biodiversity and can possibly impact human health. Unlike widespread weeds, which are commonly found in the region and deemed 'unreasonably practicable' to contain or eliminate under the Act, priority weeds are more feasible to control and eradicate.

Local Control Authorities are responsible for managing biosecurity risks related to priority weeds. The following weeds are currently prioritised in accordance with existing legislation:



Boneseed (Chrysanthemoides monilifera subsp. monilifera)

Boneseed is an invasive shrub growing up to 3 metres tall, with toothed green leaves and bright yellow flowers. It spreads rapidly, outcompeting native plants, reducing and biodiversity. Seeds can stay in the soil for over a decade, requiring long-term control.



Alligator weed (Alternanthera philoxeroides)

Alligator weed grows in water and on land, threatening wetlands, rivers and irrigation. Its rapid growth and resistance to control make it a major invasive weed with potentially devastating impacts.



Ground asparagus fern (Asparagus aethiopicus)

Ground asparagus is a dense, spiky plant with pink to white flowers and red berries. It forms thick mats of tubers and roots underground, outcompetes native plants for water and nutrients, smothers small herbs and shrubs, reduces animal habitat, and alters soil and leaf litter composition.



Green cestrum (Cestrum parqui)

Green cestrum is an invasive shrub growing up to 3 metres tall. It has slender, willow-like leaves and clusters of small, tubular greenish-yellow flowers that bloom year-round. This plant spreads quickly, forming dense thickets that outcompete native vegetation and are toxic to livestock and wildlife.



Madeira vine (Anredera cordifolia)

Madeira vine is a fast growing, invasive climbing plant with fleshy, heart-shaped leaves and white, fragrant flowers. It spreads through aerial tubers and smothers native vegetation, from ground covers to tall trees, often causing branches or trees to collapse under its weight.

Council have developed a Local Weed Management Plan (LWMP). This plan will identify priority weeds specific to the Local Government Area (LGA), including species that are not yet widespread but have the potential to cause significant damage if not controlled. These are referred to as Local Priority Weeds, currently over 15 species are included. Once the plan is finalised, it will be implemented across both public and private land.

Implementation of the Biodiversity Action Plan



The Biodiversity Action Plan presents a suite of potential projects and initiatives the City of Canada Bay should implement over the next five years to address key threats to biodiversity and make the most of local opportunities. The actions outlined aim to protect, restore and enhance biodiversity values, while also building ecological resilience and fostering community involvement.

This Plan builds on the 2019 Biodiversity Framework and Action Plan and integrates updated priorities informed by the 2023–24 Flora and Fauna Survey. These latest findings have helped refine conservation goals, ensuring the proposed actions reflect current ecological conditions.

Final selection and implementation of projects will occur each year through Council's Operational Plan process, allowing for flexibility and responsiveness to emerging needs and opportunities.

The implementation timeframe for this Action Plan is five years, after which it will undergo a comprehensive review to assess progress and refine future priorities. The actions outlined are informed by existing biodiversity research, relevant strategies and policies.

These actions align with the environmental sustainability objectives set out in the City of Canada Bay's Community Strategic Plan and Environmental Strategy. Each action is prioritised based on urgency, feasibility, and ecological impact, with priorities classified as:

High: Actions to be initiated within the first year and completed within five years.

Medium: Actions to be initiated within the first three years and completed within five years.

Low: Actions to be initiated within five years of the plan.



Nature is Protected, Connected, and Celebrated



The City of Canada Bay is committed to preserving, enhancing, and celebrating biodiversity, ensuring a resilient and thriving natural environment for future generations.



Nature is Protected and Enhanced

Council prioritises the conservation and restoration of natural areas, particularly Endangered Ecological Communities (EECs), wetlands, and remnant vegetation. Through adaptive management and scientific monitoring, biodiversity trends are tracked to inform habitat restoration and land management efforts. Protecting green spaces, tree canopies, and foreshores, alongside invasive species and strengthening planning controls, helps reduce threats to native ecosystems. Expanding native species diversity and tree canopy coverage further strengthens ecological resilience. Collaboration with landowners, community groups, and volunteers is key to ensuring long-term conservation and sustainable biodiversity management.

No	Actions	Priority	Indicators	Lead team	Supporting team		
1. Pro	1. Protect & enhance biodiversity on Council managed land						
1.1	Validate and update mapping of Coastal Saltmarsh communities and develop a management plan to control/remove any relevant threatening processes.	Medium	Completion of management plan.	Sustainability	Strategic Planning Information & Data Governance		
1.2	Update and integrate habitat and threat assessments, along with regional and local connectivity layers from the Flora & Fauna Study, into Council's GIS repository, ensuring alignment with Plans of Management and Biodiversity Action updates.	High	Updated GIS mapping.	Sustainability	Strategic Planning		
1.3	Explore the implementation measures such as fencing, delineation, and signage to regulate public access to protect environmentally sensitive areas in identified endangered ecological communities.	Medium	Enhanced protection of environmentally sensitive areas. Improved visitor compliance through clear communication and physical barriers. Increased community awareness and support for environmental conservation.	Open Space	Sustainability Open Space		

No	Actions	Priority	Indicators	Lead team	Supporting team
1. Pro	otect & enhance biodiversity on Co	ouncil man	aged land		
1.4	Explore opportunities to align the bush regeneration program, including contracts and site priorities, with a focus on supporting the management of critical habitat areas. Consider options for linking procurement processes with monitoring and reporting through bushland condition mapping to better track site progress. Assess potential new sites of critical habitat or priority areas that could benefit from the establishment of a new Bushcare group.	High	Maintenance schedule prepared for each bush regeneration site. Baseline data established for vegetation mapping.	Open Space	
1.5	Investigate developing a tailored land management plan for Endangered Ecological Communities (EECs) within Council-managed lands, parks, and reserves, integrating Flora & Fauna Study data to map priority vegetation and identify threats, ensuring targeted conservation and habitat protection strategies.	Medium	Development and implementation of land management plan with clear conservation and restoration strategies.	Open Space	Sustainability PMO
1.6	Develop and implement a biosecurity weeds training program for Council's Parks & Gardens team, focusing on early detection, accurate identification, and effective control methods for invasive species, along with updated reporting protocols and regular refresher courses to ensure best practices are maintained.	High	Percentage of Parks & Gardens team members who complete the biosecurity weeds training.	Sustainability	Open Space
1.7	Prepare an Eastern Osprey Management Plan to ensure the protection and conservation of nesting sites within Majors Bay and surrounding habitats.	High	Management plan produced and action implemented.	Sustainability	SASI Open Space

No	Actions	Priority	Indicators	Lead team	Supporting team
	nning & Process Improvement – I n City of Canada Bay	Develop a n	nonitoring and evaluation framew	ork to measure	biodiversity
2.1	Develop and maintain a standardised environmental data collection process (templates) and information repository (natural assets database) for use by Council staff, consultants and volunteers.	High	Biodiversity database created. Number of templates developed.	Sustainability	Open Space
2.2	Conduct regular, targeted field surveys at key foreshore locations to monitor the feeding and roosting sites of threatened migratory bird species.	Ongoing	Number of targeted field surveys conducted annually at key foreshore locations and the detailed records on feeding and roosting site conditions and usage by threatened migratory bird species.	Sustainability	
2.3	Conduct flora and fauna survey updates every 10 years.	Low	Delivery of updated study every 10 years.	Sustainability	Open Space
2.4	Evaluate the success of the Woody Meadows at Edwards Park, determine the key success factors, and utilise this knowledge to expand the program at strategic locations.	Medium	Establish a baseline for pollinator and bird activity. Community feedback and engagement levels.	Sustainability	Open Space
2.5	Develop guides and internal training for Statutory Planning team for assessing biodiversity impacts and legislative requirements during DA process.	High	No of guides developed.	Sustainability	Stat Planning
2.6	Integrate updated GIS mapping layers from the Flora & Fauna Study into Intramaps and LEP/DCP mapping, including Biodiversity Values sites, vegetation types, biodiversity corridors, and threatened fauna locations to support informed planning and	High	An Updated GIS Mapping Database integrated into Intramaps and LEP/DCP mapping, including revised mapping interface within Intramaps to enhance accessibility for Council staff and planners. Alignment with LEP/DCP	Sustainability	Strategic Planning
	conservation efforts.		planning controls, ensuring biodiversity data informs landuse decisions, development assessments, and conservation planning.		
			Monitoring and maintenance plan to ensure ongoing accuracy, updates, and integration with future ecological data.		



Nature is Connected

Strengthening ecological networks supports wildlife movement and habitat connectivity across the City of Canada Bay. Council is committed to regenerating biodiversity corridors, expanding habitat restoration programs, and integrating First Nations knowledge to foster a deeper connection to Country. Enhancing climate resilience, and protecting EECs through mapping and policy ensures long-term conservation. Foreshore and riparian revegetation will stabilise waterways, improve water quality, and enhance habitat availability. By reinforcing these natural connections, the City ensures a healthy, adaptable ecosystem for generations to come.

No	Actions	Priority	Indicators	Lead team	Supporting team			
	3. Develop and implement projects to educate and raise awareness about biodiversity conservation and enhancement along waterways and riparian lands							
3.1	Strengthen sediment control at development sites, enhancing early engagement with site owners and developers from DA lodgement, and increasing monitoring and enforcement in major development areas.	High	Number of site inspections and enforcement actions taken. Number of developers and site owners engaged at DA lodgement.	Compliance	Sustainability			
3.2	Investigate the feasibility for installation and maintenance of Water Sensitive Urban Design during major projects or park upgrades to slow stormwater run-off.	Low	Completion of feasibility study outlining costs, benefits, and site suitability for WSUD. Number of potential WSUD sites identified in major projects and park upgrades.	SASI	Sustainability Open Space			
3.3	Develop a program to protect and enhance aquatic habitats to improve water quality and biodiversity.	Medium	Completion of the aquatic habitat protection plan with defined strategies and actions. Number of restoration projects initiated (e.g., wetland creation, riparian buffer planting).	Sustainability	Open Space			
3.4	Advocate for collaboration with Transport NSW to mitigate RiverCat impacts on mangroves and support the restoration of affected mangrove habitats.	Low	Number of meetings or engagements held with Transport NSW on RiverCat impact mitigation.	Sustainability	SASI Open Space			
3.5	Explore opportunities for creek naturalisation projects to replace concrete-lined waterways with natural rock and native vegetation to restore habitat, improve water quality, and enhance biodiversity.	Low	Number of potential creek naturalisation sites identified through mapping and assessments. Completion of feasibility studies evaluating costs, benefits, and technical constraints.	SASI	Open Space			

No	Actions	Priority	Indicators	Lead team	Supporting team
	velop and implement projects to encoment along waterways and rip			sity conservati	on and
3.6	Collaborate with large landholders, including NSW Health, Massey Park Golf Club, and schools, to promote revegetation and conservation of foreshore areas by prioritising ecologically significant sites, providing targeted education on local ecosystems, supporting habitat expansion and enhancing native vegetation corridors.	High	Number of large landholders engaged (e.g., NSW Health, Massey Park Golf Club, schools). Number of partnerships formalised (e.g., agreements, MOUs, or commitments to conservation).	Sustainability	Open Space
3.7	Address illegal vandalism of foreshore vegetation through targeted education campaigns, enhanced staff training, and increased monitoring in vulnerable foreshore areas.	High	Number of vandalism reports.	Sustainability	Open Space
3.8	Develop a management plan for ecologically important foreshore habitats based on mapping from Study, focused on Saltmarsh sites and mapped shorebird habitats.	Medium	Development and implementation of management plan with clear conservation and restoration strategies.	Sustainability	Open Space
3.9	Investigate the feasibility of seasonal closures of key foreshore and mudflat areas to protect sensitive habitats from fishing, bait collection, and off-leash dogs, while promoting community awareness and stewardship.	Low	A Feasibility Assessment Report outlining the viability of seasonal closures for key foreshore and mudflat areas.	Sustainability	Open Space
3.10	Explore options to improve the management of dinghies and kayaks in the LGA impacting foreshore vegetation.	Medium	Development of a management plan or policy.	Open Space	Compliance
3.11	Consider establishing priority no-mow zones to protect saltmarsh at Quarantine Reserve and Henry Lawson Park.	High	A No-Mow Zone Implementation Plan for Quarantine Reserve and Henry Lawson Park, and monitoring framework to assess habitat health, vegetation regrowth, and biodiversity improvements over time.	Open Space	

No	Actions	Priority	Indicators	Lead team	Supporting team
	velop and implement projects to on the control of t			rsity conservati	on and
3.12	Investigate creation of a shorebird sanctuary covering the mudflats at Hen and Chicken Bay as Category 1 Wildlife Protection Area – Public places where both cats and dogs are prohibited under sections 30 (1) (b) and 14 (1) (h) of the Companion Animals Act 1998.	Low	A Shorebird Sanctuary Feasibility Report delivered for Hen and Chicken Bay.	Sustainability	Transport NSW Fisheries
4. En	hance corridors and connectivity	on Council	managed land		
4.1	Explore opportunities for a corridor reconstruction program to enhance biodiversity through strategic planting along identified habitat corridors.	High	Street Tree Masterplan developed.	Open Space	Sustainability PMO Strategic
4.2	Explore opportunities to increase the number of street trees on nature strips along the green grid using species using low-maintenance, high-faunavalue species.	Medium	Length (km) of habitat corridors enhanced with new plantings.	Open Space	Sustainability Roads & Traffic
4.3	Explore opportunities to expand supporting habitat and corridors between Queen Elizabeth Park to foreshore vegetation by increasing native vegetation within Rothwell Park, Jessie Stewart Reserve, Greenlees Park and Massey	High	Length (km) of habitat corridors enhanced with new plantings.	Open Space	SASI Sustainability

Park Golf Club.

No	Actions	Priority	Indicators	Lead team	Supporting team
5. Pro	ovide mechanisms to support priv	ate landho	lders to protect and enhance bio	diversity values	
5.1	Expand and enhance the Backyards for Biodiversity program to empower residents	Medium	Number of private landholders participating in the program.	Sustainability	
	with the resources, guidance, and incentives needed to restore and improve habitat on private land.		Total area of private land where habitat enhancements have been implemented.		
5.2	Collaborate with sports and community groups, including major private landholders (e.g., Concord Golf Course, schools, NSW Health), to protect and enhance vital vegetation areas.	High	Total area of key vegetation protected or improved.	Sustainability	Open Space
5.3	Implement a community-based program to educate residents on identifying and reporting priority weed species.	Low	Number of priority weed species reports submitted by residents.	Sustainability	
5.4	Implement community-led habitat planting initiatives in parks, sportsgrounds, road reserves, and along naturalised creek/canal corridors.	Medium	Number of events and people participating.	Open Space	SASI Sustainability
5.5	Engage with community applicants during DA pre-lodgement process to include legislative biodiversity requirements.	High	No of applicants engaged.	Stat Planning	Sustainability
6. Int	egrate First Nations Knowledge a	nd Care fo	r Country Practices in Biodiversit	y Conservation	
6.1	Develop an understanding of the local Traditional Owners or Custodians of the lands and waters within our organisation's operational area, and more widely across the region.	Medium	Share information across Council staff.	Comms	All
6.2	Protect and enhance native vegetation and habitats in partnership with Indigenous providers and increase the use of indigenous species and 'Caring for Country' management practices.	Medium	Percentage of native vegetation enhanced using native species or 'Caring for Country' management practices.	Open Space	Sustainability



Nature is Celebrated

Council fosters a community-driven approach to biodiversity conservation, engaging residents through volunteer programs, citizen science, and environmental education. Initiatives like Bushcare, and Backyards for Biodiversity empower people to restore and protect local ecosystems. The Environmental Grants program supports grassroots conservation projects, while improvements to trails, signage, and green spaces enhance public appreciation of nature. Wildlife and flora education programs deepen understanding of local ecosystems, ensuring biodiversity is valued, protected, and celebrated by the community.

No	Actions	Priority	Indicators	Lead team	Supporting team	
7. Enhance community engagement and stewardship in biodiversity conservation in City of Canada Bay						
7.1	Develop and implement an education and engagement campaign that raises awareness of local threatened species, foreshore biodiversity, and responsible pet ownership to foster stronger community connections to nature, incorporating targeted CALD messaging as needed.	Medium	Number of people participating. Pre and post surveys to assess awareness and changes in attitudes. Number of resources/ workshops/events delivered.	Sustainability		
7.2	Identify and engage opportunities for residents, local businesses, and community groups to actively participate in or sponsor community planting and weeding days.	Medium	Number of residents, local businesses, and community groups engaged in each event. Number of community planting and weeding days held and the attendance at each event.	Sustainability	Open Space	
7.3	Increase opportunities and participation for residents, community groups and businesses to participate in environmental Citizen Science.	High	Number of people participating.	Sustainability		
7.4	Explore opportunities to encourage more residents and community members to join Bushcare and community planting days. • Further promote Bushcare. • Provide training and resources to Bushcare volunteers.	Medium	Number of community and business volunteers and/or total volunteer hours contributed.	Open Space	Sustainability	

No	Actions	Priority	Indicators	Lead team	Supporting team		
8. Pro	8. Promote biodiversity and increase community interaction						
8.1	Ensure biodiversity achievements and activities are promoted in Councils community newsletters and Annual report.	Ongoing	Annual Report updated and promo in Council media avenues.	Comms Sustainability	All		
8.2	Promote and reward programs that recognise and celebrate environmental volunteer groups e.g. Sustainability Awards, Volunteers Week, etc.	Ongoing	Environmental volunteers recognised annually, and percentage of active volunteer groups participating.	Sustainability	Open Space Comms		
8.3	Update and install regulatory and interpretive signage at key bushland, foreshore reserves, and parks to provide clear, up-to-date information on threatened species, endangered ecological communities, and broader biodiversity values and impacts.	High	Number of signs/materials updated/installed.	Open Space Sustainability	Compliance		
8.4	Publicly exhibit updated biodiversity corridors with zone type definitions in the DCP, to be accompanied by future Biodiversity Corridor Program including educational and onground initiatives for residents in mapped corridors.		Updated biodiversity corridor zones published followed by formal adoption into the DCP.	Sustainability	Strategic Planning		

No	Actions	Priority	Indicators	Lead team	Supporting team		
9. Sha	9. Share & build knowledge						
9.1	Enhance biodiversity management knowledge for Council staff (e.g., environmental, planning, infrastructure teams) through internal workshops covering:	Medium	Number of training delivered and number of staff who completed the training.	Sustainability	Open Space PMO Building Services Road and		
	1. Biodiversity Fundamentals & Biodiversity Conservation Act Responsibilities: Understand what biodiversity is and learn your responsibilities under the Act.				Traffic Statutory Planning SASI		
	2. Integrating Biodiversity into Planning: Explore how to incorporate biodiversity considerations into planning processes, such as development applications (DA).						
	3. Best Practice Procedures: Learn proven methods to protect and enhance biodiversity across Council operations, including sustainable practices for designing new infrastructure (with green options), maintaining assets, and guiding procurement.						
9.2	Implement internal biodiversity training to advise council's Planning team on legal requirements for development adjacent to foreshore areas mapped on the Biodiversity Values Map. Educate and promote a preference for environmentally friendly seawalls.	High	Training completed.	Sustainability			
9.3	Establish an internal Environmental working group to focus on biodiversity awareness across Council departments.	Low	Environmental group formed. Number of meetings per year.	Sustainability	All		

No	Actions	Priority	Indicators	Lead team	Supporting team		
10. Co	10. Collaborate with external agencies						
10.1	Continue to actively engage with State and Federal agencies, and neighbouring councils to share resources and knowledge, identify collaborative and grant opportunities to improve biodiversity outcomes.	Ongoing	Number of joint projects, funding applications, and knowledge-sharing activities undertaken annually with State/Federal agencies and neighbouring councils, and the total value of grants secured through these partnerships.	All			
10.2	Maintain partnerships with external organisations like SOPA, PRCG, and Local Land Council to coordinate regional efforts, collaborate on grants, share resources, stay informed on policies, and adopt green and smart technologies for community engagement, education, and climate adaptation.	Ongoing	Annual number of partnership activities.	Sustainability	Open Space SASI		



