



DRAFT State of the Environment and Environmental Management Plan 2025

Shire of Broome
Nov 2025

Prepared by:

Land Insights

PO Box 289

Mt Lawley WA 6929

(08) 9271 8506

admin@landinsights.com.au

Document Name: SoE Broome 2025 (Rev 0).docx

Document History:

Date	Document Revision	Document Manager	Document Review	Summary of Document Revision	Client Delivered
May 25	0	AA	MT	Preliminary Draft for Client Review	Jun 25
Aug 25	0	AA	MT	Draft after SOB review	
Sept 25	1.1	AA	MT	Simplified actions and text. For client review.	Sept 25

Important Note:

"The information contained in this report has been prepared with care by the author(s), or it has been supplied to the author(s) by apparently reliable sources. In either case, the author(s) have no reason to doubt its completeness or accuracy. However, neither the author(s) company nor its employees guarantee the information, nor does it or is it intended to form part of any contract. Accordingly, all interested parties should make their own inquiries to verify the information, as well as any additional or supporting information supplied, and it is the responsibility of interested parties to satisfy themselves in all respects.

This document may include content generated or assisted by Artificial Intelligence (AI) tools. The use of AI is strictly limited to functions such as data aggregation, research support, summarisation, and similar non-decisional tasks. AI-generated content is not intended to replace professional advice or input. All AI outputs have been reviewed and validated by appropriately qualified personnel to ensure accuracy and relevance.

This report is for the use only of the party to whom it is addressed. Land Insights disclaims responsibility to any third party acting upon or using the whole or part of its contents."



Executive Summary

The *State of the Environment 2025 Report* provides a comprehensive overview of environmental conditions across the Shire of Broome and tracks progress made since the 2016 report. It also incorporates a high-level strategic Environmental Management Plan (EMP) to guide responses to environmental challenges and opportunities over the next decade.

The report identifies key trends in environmental management. Persistent issues such as land degradation, biodiversity loss, and waste management continue to present significant challenges. At the same time, there have been positive developments, including improved fit-for-purpose water initiatives, advances in renewable energy, and enhanced coastal monitoring programs.

Several barriers remain to achieving improved environmental outcomes. Ongoing vegetation decline linked to development and land-use change is a major concern. Additionally, the lack of cohesive policy integration across government agencies and the presence of gaps in governance structures have hindered the implementation of sustainable practices. Addressing these obstacles is vital to ensure lasting environmental protection and progress.

Addressing these obstacles is essential for protecting the environment and supporting long-term progress. The EMP sets out clear actions, including strengthening biodiversity protections, treating water as a valuable resource, and fostering greater investment in renewable energy infrastructure. It also highlights the need for innovative waste management systems to reduce environmental impacts and support community wellbeing.

Achieving these objectives will require collaboration among all stakeholders. The report emphasises the importance of sustained resources, active partnerships with Traditional Owners to embed Indigenous knowledge and perspectives, and transparent governance to build trust and accountability.

The *State of the Environment 2025 Report* serves both as an evaluation of current conditions and a strategic roadmap for future environmental management. It underscores the need for collective action by the community, Council, policymakers, and environmental partners to build resilience and safeguard the region's natural values for the future.



Table of Contents

1	INTRODUCTION	6
1.1	PURPOSE OF THE REPORT	6
1.2	WHO WE ENGAGED	7
1.3	KEY STAKEHOLDERS AND COMMUNITY GROUPS	7
1.4	LIMITATIONS IN REPORT PREPARATION	10
2	CONTEXT AND BACKGROUND	12
2.1	UNDERSTANDING THE STATE OF THE ENVIRONMENT (SoE) FRAMEWORK	12
2.2	THE SHIRE'S ROLE IN ENVIRONMENTAL MANAGEMENT	12
2.3	SHIRE OF BROOME CONTEXT	13
2.4	KEY THEMES	18
2.5	CURRENT AND FUTURE CHALLENGES.....	18
2.6	IMPLEMENTATION OF THE STATE OF THE ENVIRONMENT REPORT/ENVIRONMENTAL MANAGEMENT PLAN	20
3	SCOPE & METHODOLOGY	23
3.1	SCOPE	23
3.2	APPROACH	23
3.3	CHANGE ASSESSMENT SUMMARY TABLES.....	24
4	LAND MANAGEMENT	26
4.1	DBCA MANAGED LANDS AND CONSERVATION AREAS	27
4.2	DINOSAUR TRACKS: MANAGEMENT	31
4.3	2016 SITUATION.....	33
4.4	2025 SITUATION.....	34
4.5	CHANGE ASSESSMENT SUMMARY	37
5.6	EMP ACTIONS (2025-2035)	4
5	BIODIVERSITY	12
5.1	BACKGROUND	12

5.2	2016 SITUATION.....	19
5.3	2025 SITUATION.....	20
5.4	CHANGE ASSESSMENT SUMMARY	21
5.5	EMP ACTIONS (2025-2035)	23
6	WATER RESOURCES.....	30
6.1	2016 SITUATION.....	34
6.2	2025 SITUATION.....	35
6.3	WATER – CHANGE ASSESSMENT SUMMARY.....	37
6.4	EMP ACTIONS (2025-2035)	38
7	COASTAL ENVIRONMENTS.....	44
7.1	2016 SITUATION.....	45
7.2	2025 SITUATION.....	46
7.3	CHANGE ASSESSMENT SUMMARY	49
7.4	EMP ACTIONS (2025-2035)	51
8	ENERGY	54
8.1	2016 SITUATION.....	55
8.2	2025 SITUATION.....	56
8.3	ENERGY – CHANGE ASSESSMENT SUMMARY.....	58
8.4	EMP ACTIONS (2025-2035)	60
9	WASTE MANAGEMENT	65
9.1	2016 SITUATION.....	65
9.2	2025 SITUATION.....	67
9.3	CHANGE ASSESSMENT SUMMARY	71
9.4	EMP ACTIONS (2025-2035)	73
10	CLIMATE CHANGE	77
10.1	2016 SITUATION.....	78
10.2	2025 SITUATION.....	78

10.3	CHANGE ASSESSMENT SUMMARY	80
10.4	EMP ACTIONS (2025-2035)	82
11	APPENDIX A: AUDIT STATUS OF 2016 REPORT	86
11.1	LAND	86
11.2	BIODIVERSITY	87
11.3	WATER	92
11.4	COASTS	96
11.5	ENERGY	100
11.6	WASTE	104
11.7	GLOSSARY & ACRONYMS	107

Figures

FIGURE 2.1– Site Location

FIGURE 2.2 – Broome Tenure

FIGURE 2.3 – Managed Conservation

FIGURE 4.1 – DBCA Managed Reserves

FIGURE 4.2 – Yawuru Conservation Estate

FIGURE 4.3 – Dinosaur Tracks Management

FIGURE 5.1 – Threatened Ecological Communities

FIGURE 5.2 - Dampier Peninsula Vegetation Cover 2016 vs 2022

FIGURE 5.3 - Pre-European Vegetation

FIGURE 5.4 - Environmentally Sensitive Area & RAMSAR

FIGURE 5.5 - Native Vegetation and Clearing Permits

FIGURE 6.1 - Public Drinking Water Source Area

FIGURE 6.2 - Drainage Water Lines



Tables

Table 4.1 - Indicators (Land Management)	1
Table 4.2 - EMP Actions (Land Management).....	4
Table 5.1 - Indicators (Biodiversity)	22
Table 5.2 - EMP Actions (Biodiversity).....	23
Table 6.1 - Indicators (Water Resources)	37
Table 6.2 - EMP Actions (Water Resources)	38
Table 7.1 - Indicators (Coastal Environments)	49
Table 7.2 - EMP Actions (Coastal Environments)	51
Table 8.1 - Indicators (Energy & Emissions).....	58
Table 8.2 - EMP Actions (Energy & Emissions).....	60
Table 9.1 - Indicators (Waste Management)	71
Table 9.2 - EMP Actions (Waste Management)	73
Table 10.1 - Indicators (Climate Change)	80
Table 10.2 - EMP Actions (Climate Change)	82

Appendices

APPENDIX A – AUDIT STATUS OF 216 REPORT



1 Introduction

The State of the Environment 2025 Report defines the Shire of Broome's role in environmental management in terms of both its direct responsibilities and its broader spheres of influence. The scope has been shaped by the Shire's recognised roles of action (Fund, Provide, Partner, Regulate, Facilitate and Advocate) which together capture the ways the Shire can respond to environmental pressures and drive positive outcomes.

As such, the report goes beyond reporting on environmental conditions. It looks at how the Shire takes action by identifying where it can lead, where collaboration is needed, and how it can support and empower the community. While the Shire does not control every aspect of environmental management, it plays an important role in setting priorities, allocating resources, and advocating for local interests within regional and state policy. The report therefore covers:


- The environmental themes and issues most relevant to the Shire, including biodiversity, land, coastal/marine, water, energy, waste and climate change.
- The mechanisms available to the Shire to address these themes, whether through internal operations, external partnerships, or advocacy to higher levels of government.
- The effectiveness of current action, drawing on performance indicators, trend analysis, and community input since the baseline established in the State of Environment Report 2016.
- The integration of the Environmental Management Plan (EMP), which translates assessment into practical, measurable initiatives across the six levers.

1.1 Purpose of the Report

The primary purpose of the State of the Environment 2025 Report is to provide an objective and structured assessment of environmental conditions within the Shire of Broome, drawing on developments since the 2016 baseline. The report is both a review and a forward-looking document. It examines the progress, or lack thereof, in addressing environmental pressures across key thematic areas, while setting out a high-level Environmental Management Plan (EMP) to guide future policy, operations and investment.

The report's function is to support evidence-based decision-making and strategic planning. It consolidates a broad set of environmental indicators and links them with policy responses, regulatory roles, service delivery obligations and community expectations. In doing so, it enables the Shire to better understand where it is succeeding, where performance has stagnated, and where intervention is required. By assigning trend directions and confidence ratings, the report also encourages transparency and accountability in how environmental outcomes are tracked over time.

The integrated EMP is not intended to replace existing responsibilities. Rather, it clarifies the Shire's role within the wider governance framework. While the Shire is not the lead authority in all



areas of environmental management, the EMP defines where it can play an influential role through funding, regulation, advocacy, and partnership. It also outlines targeted actions that reflect local values, meet legislative requirements, and support broader regional environmental objectives.

Importantly, the report reflects significant community engagement undertaken as part of the project, and seeks to bring together Traditional Owner knowledge, scientific assessments, operational insights and public sentiment. It is structured to help Council, staff and partners prioritise effort, secure resourcing, and coordinate delivery over the next decade.

By focusing on practical and measurable initiatives, it provides a clear platform for adaptive management and continuous improvement in environmental governance. The inclusion of climate change as a standalone theme also signals a maturing recognition of emerging risks and the need for integration across planning, infrastructure and health systems.

Overall, the report serves as both a record and a strategic tool. It is intended to be used actively in decision-making, budget planning and progress evaluation, ensuring that environmental sustainability is a core part of the Shire's long-term direction.

1.2 Who we engaged

The community research included stakeholder and community information gathered through a survey conducted in March 2025 (122 people engaged), plus targeted one-on-one interviews and focus workshops (50 attendees).

The sample of respondents included:


- Residents of Broome townsite and outlying communities
- Traditional Owners and Ranger groups
- Environmental organisations and naturalist groups
- Tourism and agricultural industry representatives
- State agencies with environmental responsibilities.

This community research assisted to identify key community priorities and perceptions of the Plan and the Shire's administration of the Plan. A detailed Consultation Outcomes Report has been prepared and provided to the Shire.

1.3 Key Stakeholders and Community Groups

Department of Biodiversity, Conservation and Attractions (DBCA)

The Department of Biodiversity, Conservation and Attractions (DBCA) has a central role in managing much of the region's conservation estate. Collaborative opportunities include ongoing support for joint management plans, particularly for the Minyirr Buru Conservation Park, Guniyan



Binba Conservation Park, Yawuru Birragun Conservation Park, and Roebuck Bay Marine Park. These partnerships provide a practical way to apply consistent standards and coordinated approaches across different areas of responsibility, supporting the integrity of the Broome environmental system.

DBCA also contributes scientific expertise and policy guidance that strengthen the Shire's land care programs and help build long-term environmental resilience.

Traditional Owners

Native title rights and interests exist throughout a majority of the Shire. There is a diverse range of native title holders who are the traditional owners of the land and are represented by several registered native title body corporates (RNTBCs). This includes:


- Karajarri Traditional Lands Association RNTBC
- Bardi and Jawi Niimidiman Aboriginal Corporation RNTBC
- Gogolanyngor Aboriginal Corporation RNTBC
- Nimanburr Aboriginal Corporation RNTBC
- Nyangumarta Karajarri Aboriginal Corporation RNTBC
- Nyangumarta Warran Aboriginal Corporation RNTBC
- Nyul Nyul PBC Aboriginal Corporation RNTBC
- Walalakoo Aboriginal Corporation RNTBC
- Yanunijarra Aboriginal Corporation RNTBC
- Yawuru Native Title Holders Aboriginal Corporation RNTBC
- Joombarn-buru Aboriginal Corporation RNTBC
- Birriman-gan PBC

The connection that traditional owners have with Country means they play an integral role in land and sea management, bushfire control, heritage protection and economic and social development opportunities. The Shire of Broome has a unique partnership with Yawuru RNTBC through joint-management of the Yawuru Conservation Estate which is intertwined within the Broome townsite. This is the only tripartite partnership with DBCA for a conservation estate in Western Australia.

Dinosaur Coast Management Group (DCMG)

The DCMG plays a vital role in advocating for the preservation of the National Heritage-listed dinosaur trackways of the Broome coastline. These prehistoric features are of global paleontological significance and as a tourism attraction hold economic and social value. The features are increasingly vulnerable to climate impacts and at risk of damage due to unmanaged tourism access.

Collaboration with DCMG offers an opportunity to jointly promote responsible tourism, interpretive signage, access controls, and coastal protection measures with consistency and that reinforces



environmental values of Broome and its community with respect to natural areas. The Shire has played a role as advocate for external funding for DCMG and the inclusion of the Dinosaur Coast in broader cultural and natural heritage strategies.

Broome Bird Observatory (BBO)

The BBO contributes to the collection of internationally significant bird monitoring data and public education about migratory shorebirds that visit Roebuck Bay. This adds value to the Broome nature experience and holds social and economic significance. Supporting BBO's public outreach and visitor infrastructure could strengthen eco-tourism appeal and increase awareness of Broome's Ramsar wetland responsibilities as part of a globally connected environmental program.

Environs Kimberley

The leading regional environmental NGO, Environs Kimberley is deeply involved in conservation advocacy, community education, and ecological restoration. Their practical application of technical expertise in landscape protection and biodiversity recovery adds value and effectiveness as a partner for Shire-supported and delivered environmental programs. Environs Kimberley can support bush regeneration, invasive species management, and education initiatives aligned with EMP themes.

Department of Planning, Lands and Heritage (DPLH)

The Department of Planning, Lands and Heritage (DPLH) has statutory responsibility for regional planning, land tenure including management of UCL, and heritage protection. Established legislative processes guide the integration of environmental values into statutory plans, rezoning processes, and assessments of Aboriginal heritage sites.


Within this framework, the Shire's role is to provide local data, land use context, and community insights to support DPLH-led projects, helping to ensure that regional growth is managed consistently with existing environmental and cultural protections.

Kimberley Ports Authority (KPA)

The Port of Broome is the major hub for supply of goods, exports, related economic activities such as tourism, marine industries and maritime operations. KPA operates adjacent to and affects several important environmental areas. Inclusion and collaboration with KPA in environmental policy and management is essential for sustainable marine and coastal management.

Port activities hold a potential to set standards for environmental responsibility and care. Therefore, the KPA can advocate for best-practice environmental standards and inform planning expertise to support balanced outcomes for both the economy and the environment.

Society for Kimberley Indigenous Plants and Animals (SKIPA)



SKIPA is a community-based group that works to protect the ecosystem of the Kimberley and operates in the Broome area. Its activities include native plant propagation, habitat restoration, and bush food education. This role is an important and valued niche.

Broome Chamber of Commerce and Industry (BCCI)

The Chamber of Commerce represents Broome's business community and therefore it is an important stakeholder in promoting sustainable economic development and the brand of Broome as a place of natural beauty, wonder and with its own distinctive lifestyle and business approach. The business approach is a helpful lead to securing funding, level of good organisation, and working with business operators to deliver a consistent narrative about Broome as a place that values and acts to conserve the environment.

The Shire can work with the BCCI to advocate for best practice approaches to environmental sustainability in local business operations. This includes the uptake of renewable energy sources such as solar and wind, improvements in energy efficiency, initiatives to reduce waste, and the promotion of sustainable tourism. By supporting and showcasing these practices, the BCCI and the Shire can demonstrate leadership and inspire other operators to adopt environmentally responsible behaviours.


The Chamber is well known and respected and therefore can also act as a conduit for promoting environmental education to industry and aligning economic development with the Shire's environmental values.

1.4 Limitations in Report Preparation

While the State of the Environment 2025 Report provides a structured and wide-ranging assessment of environmental performance, there are several limitations that affect its overall accuracy and completeness. The most significant of these is the availability and quality of data across the different themes. The report relies heavily on existing datasets, previous surveys, and community feedback, rather than new technical measurements such as high-resolution remote sensing or on-ground environmental sampling.

As a result, some trend indicators are based on estimates or modelled assumptions instead of consistent, verifiable measurements. This is particularly evident in remote or less-monitored areas. The scope of stakeholder engagement, while broad, was also limited by time and resources. Input from Traditional Owner groups, industry representatives, and community members has been a valuable part of the report.

However, not all perspectives could be explored in depth. The diversity of views, priorities, and cultural knowledge systems requires ongoing engagement to be fully integrated into strategic environmental planning. This is especially important when interpreting contested land use outcomes or aligning environmental objectives with Traditional Knowledge.



Another limitation relates to the report's defined scope, which is bounded by the jurisdiction of the Shire of Broome. The Shire covers a large and diverse geographical area, with multiple land tenures extending well beyond the townsite and its immediate surrounds, as shown in the map below. While this broad coverage captures significant environmental values, it also highlights the limits of the Shire's direct influence. In many cases, responsibility rests with State Government agencies, Traditional Owners, or private landholders.

As a result, some broader environmental factors, such as cross-boundary ecosystem pressures, regional climate impacts, and collaborative conservation opportunities, could not be explored in detail. These interactions have been acknowledged where possible, but data availability and jurisdictional boundaries place practical constraints on the depth of analysis.

These limitations underline the need for ongoing review, continuous data collection, and flexible management arrangements that allow the Environmental Management Plan to evolve with new evidence and partnerships. Nonetheless, further investment in monitoring, cross-agency collaboration, and adaptive governance will be required to strengthen the reliability and responsiveness of future updates.



2 Context and Background

2.1 *Understanding the State of the Environment (SoE) framework*

The State of the Environment (SoE) report provides a structured and evidence-based assessment of environmental conditions across the Shire of Broome. It builds on the 2016 SoE by reviewing changes over the intervening years and offers a forward-looking perspective through the integration of an Environmental Management Plan (EMP). The purpose of this report is not only to evaluate what has changed, but to identify where key environmental pressures remain unresolved and where focused action is required to support long-term sustainability.


The assessment is grounded in the Pressure–State–Response (PSR) framework. This structure enables the Shire to examine the cause-and-effect relationship between environmental pressures. Pressures such as climate change, urban expansion, or invasive species. Additionally, the condition of natural assets, and the effectiveness of current responses. Within this framework, each theme is supported by indicators that track environmental trends, including remnant vegetation cover, water reuse, coastline movement, and emissions profiles.

The report's findings are informed by a combination of technical data, community feedback, Traditional Owner insights, and inter-agency inputs. Each environmental theme (Land, Biodiversity, Water, Coastal and Marine Environments, Energy, Waste, and Climate Change) is evaluated against its 2016 baseline, with current performance assessed in terms of direction of change, relative condition, and confidence in available evidence.

Beyond providing a snapshot of environmental health, the SoE supports strategic planning and governance. It highlights opportunities to embed environmental resilience into local decision-making, capital works, and regulatory functions. In doing so, it positions environmental performance not as a separate consideration, but as a core element of the Shire's operational responsibilities and partnership frameworks. The findings and actions outlined here serve to inform Council priorities, guide future investment, and support collaborative management with stakeholders across the region.

2.2 *The Shire's role in Environmental Management*

The Shire of Broome governs a large and diverse area (approximately 56,000 km²), encompassing the Broome townsite and extensive coastal, bushland and pastoral landscapes across multiple land tenures. The Shire's jurisdiction in environmental management is varied: it ranges from direct service delivery to advocacy, land-use planning and coordination with State agencies, Traditional Owners and other land managers. The scope of tenure beyond the townsite also limits the Shire's direct control in many places, even where environmental values are high.



The Shire is not the lead agency for major environmental systems such as marine conservation, national parks or groundwater regulation. Instead, it is an acknowledged stakeholder and enabler helping to protect and enhance the environment at the local level and acting as a bridge to community interests and expectations. The Shire's most active responsibilities are in land-use planning, waste management, local infrastructure, and protection of local biodiversity, particularly across Shire-managed reserves and road verges. In these domains, the Shire sets and administers planning scheme provisions and approvals and delivers operational services and corporate governance to meet public standards.

Within and around the townsite, collaboration between Yawuru Registered Native Title Body Corporate (RNTBC), the Department of Biodiversity, Conservation and Attractions (DBCA) and the Shire provides a culturally respectful and ecologically informed basis for conservation, under the Yawuru Indigenous Land Use Agreement (ILUA). The Yawuru Conservation Estate which is jointly managed by Yawuru, the Shire and DBCA, recognises Traditional Knowledge alongside conservation science. The Yawuru Conservation Estate includes Threatened Ecological Communities (TECs), Ramsar-listed wetlands, turtle nesting beaches, extensive mangrove systems, and habitat for migratory birds and marine mammals. Joint Management Plans aim to enhance the ecological condition of these sensitive environments while enabling ongoing cultural practices, community access and responsible tourism.

Accordingly, this report does not assess performance against Joint Management Plan indicators. The Shire's role is to support delivery where appropriate through planning decisions, infrastructure management, advocacy, data-sharing and community engagement and to reference joint management objectives when setting its own priorities.

2.3 Shire of Broome context

The Shire of Broome is located in the Kimberley region of Western Australia, approximately 2,200 kilometres north of Perth. It covers a vast and diverse area of more than 56,000 square kilometres, extending from the Dampier Peninsula in the north to the southern boundary near Eighty Mile Beach. The Shire includes a mix of urban, rural, and remote communities, along with extensive areas of conservation land and coastline. Figure 2.1 provides an overview of the Shire's location and boundaries, while Figures 2.2 and 2.3 show more detailed views of land tenure and managed conservation areas in and around the Broome townsite.



Figure 2.1 - Site Location

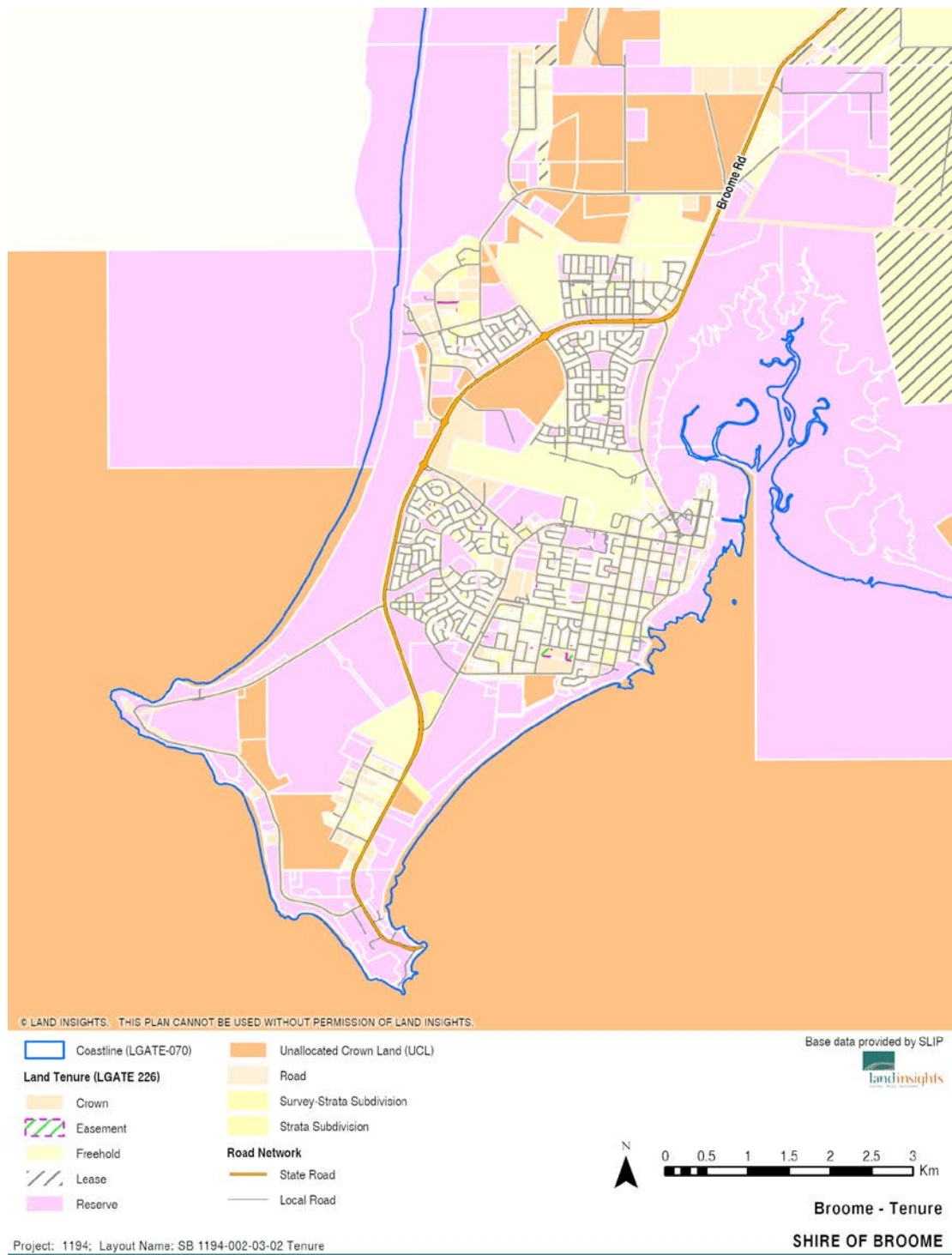


Figure 2.2- Broome Tenure

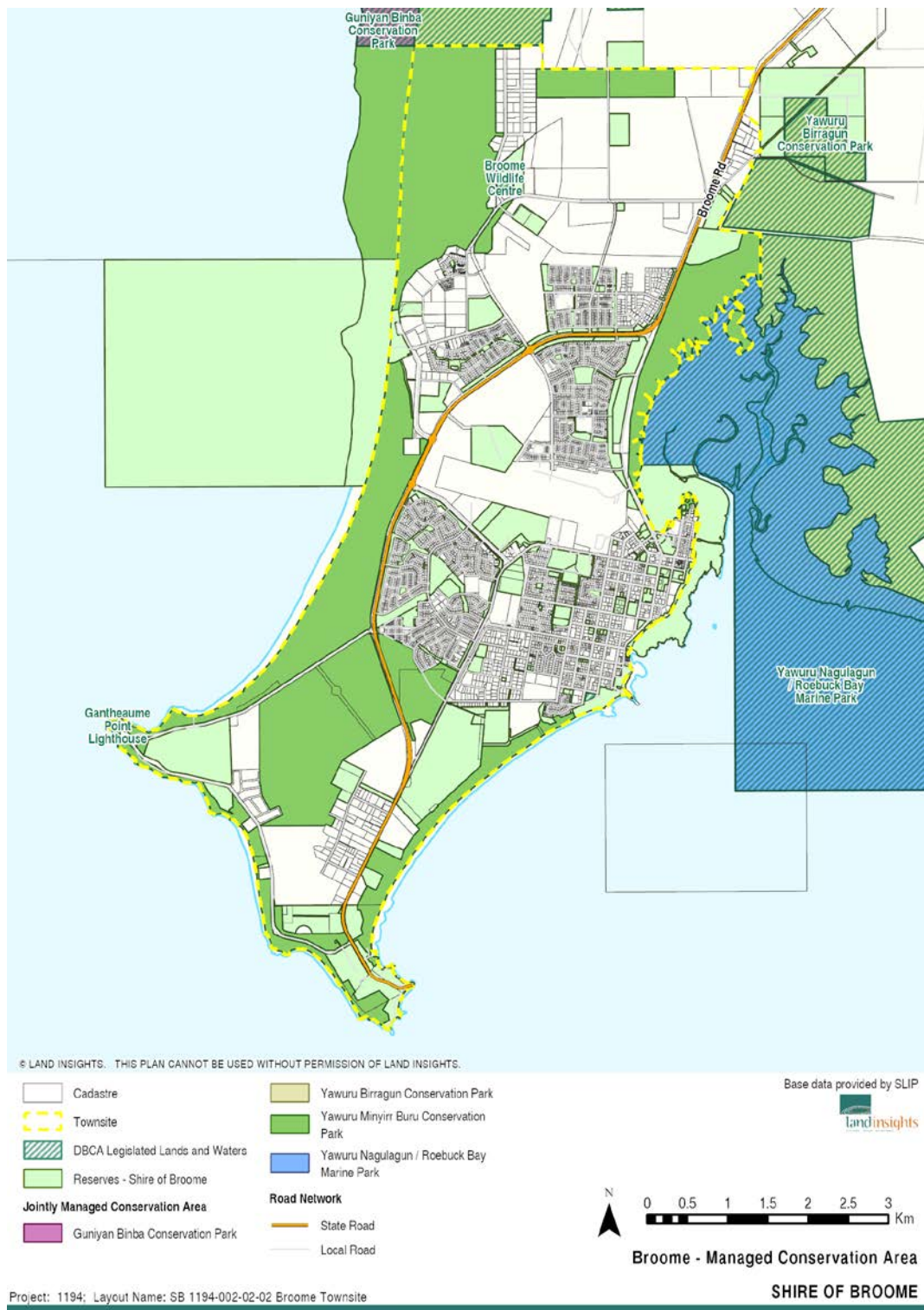



Figure 2.3 - Managed Conservation Area



Broome is the principal population centre, with most of the Shire's residents living in and around the town. According to the latest Australian Bureau of Statistics data, the Shire has a population of around 18,000 people, which more than doubles during peak tourism periods. The Shire is home to a diverse community that includes Traditional Owners, long-term residents, and a seasonal workforce that supports key industries.

The economy of the Shire is driven by tourism, pearling and aquaculture, pastoral activities, retail, and government services. Broome's role as a regional service hub supports industries across the Kimberley, such as oil and gas, while its port provides access for live cattle exports, cruise ships, and other shipping activities. Tourism is a major contributor to the local economy, with visitors attracted to the area's unique natural and cultural landscapes, including Cable Beach, Roebuck Bay, and significant Aboriginal heritage sites.

Much of the Shire's land area consists of conservation reserves and other natural areas managed by the Department of Biodiversity, Conservation and Attractions (DBCA), Traditional Owners, DPLH and the Shire itself. Jointly managed parks such as the Yawuru Minyirr Buru Conservation Park, Yawuru Birragun Conservation Park, Guniyan Binba Conservation Park, and Yawuru Nagulagun / Roebuck Bay Marine Park are shown in Figure 2.3. These areas are important for protecting biodiversity and cultural heritage, while also providing opportunities for recreation and tourism.

The combination of a growing population, increasing industrialisation, diverse land uses, and areas of high environmental value creates both opportunities and challenges for sustainable management. Understanding this context is essential for interpreting the environmental trends and priorities discussed throughout this report.



2.4 Key Themes

The 2025 State of the Environment report is structured around seven key environmental themes:

1. Land Management
2. Biodiversity
3. Water Resources
4. Coastal Environments
5. Energy & Emissions
6. Waste Management; and
7. Climate Change (new theme).

Climate change has been introduced as a new theme in this review. Its impacts are increasingly evident worldwide, with more frequent and severe environmental events highlighting the urgency of adaptation and mitigation. For the Shire of Broome, climate change is not only a theme but also a factor influencing every other environmental management area such as sustainability of water resources, energy systems, and waste management practices.


Each theme in this report is assessed in terms of current condition and the responses being led either by the Shire or in partnership with other agencies, Traditional Owners, and the community. By including climate change as a dedicated theme for the first time since the 2015 report, this review acknowledges its central role in shaping both present challenges and future directions for environmental management across the Shire.

2.5 Current and Future Challenges

The Shire of Broome is experiencing increasing interest in both urban and industrial development, creating a range of environmental and planning challenges. Key issues identified include:

- Ongoing urban expansion and the environmental pressures that result.
- Impacts of climate change, including extreme weather events, sea level rise, warming oceans and ecosystem distress.
- Limited staffing and financial resources to support environment monitoring and enforcement.
- Stormwater management, drainage and erosion concerns.
- Community expectations that often exceed the Shire's legislative powers, responsibilities and capacity.
- Pressures from tourism and recreational activities on environmentally sensitive areas.
- Biodiversity threats (such as cane toads).

Community engagement throughout this process has demonstrated strong support for sustainability, biodiversity conservation, and climate adaptation. However, participants also expressed frustration with the perceived lack of progress and the fragmented nature of available environmental information and support.



Local community groups and school-led sustainability programs have contributed meaningfully to environmental protection efforts. Despite their dedication and outcomes, these initiatives often lack formal structural or financial support to expand their impact.

Another ongoing challenge is the widespread misunderstanding of the Shire's specific environmental responsibilities vs. those of other agencies, such as DBCA, DPLH, Department of Water and Environmental Regulation (DWER), Department of Primary Industries and Regional Development (DPIRD), Department of Fire and Emergency Services (DFES) and Native Title bodies. This confusion can lead to misplaced accountability and disengagement from stakeholders.

Addressing these issues will require improved governance transparency, stronger inter-agency coordination, and greater public awareness of roles and responsibilities. Promoting environmental education in culturally appropriate, practical, and engaging formats which also celebrate local achievements, will be essential to build trust and momentum over the coming decade.



2.6 Implementation of the State of the Environment Report/Environmental Management Plan

The Shire's Environmental Management Plan (EMP) sets out the actions needed to protect and enhance the local environment. It recognises the Shire's many roles as a coordinator, advocate, and sponsor of environmental programs.

This section describes how these roles can be used to influence and coordinate the activities of others involved in environmental management, ensuring that efforts are aligned and resources are used effectively.

Fund

The first role available to the Shire is the allocation of funding to environmental programs. By directing capital and operational budgets to initiatives such as revegetation, coastal hazard adaptation, feral animal control, and waste minimisation infrastructure, the Council demonstrates its priorities and provides the resources needed to turn plans into action. Effective administration involves leading by example, supporting others, and sharing the successes of funded projects with the community and stakeholders.

Additional funding can be secured through external sources, including community grants and service-level agreements. These arrangements enable Traditional Owners, research institutions, and local not-for-profit organisations to deliver specialist elements of the Environmental Management Plan (EMP). Each management action in the plan has been assessed for its resource needs and budget requirements, with indicative timeframes of up to 10 years.


Provide

This relates to activities where the Shire retains direct service responsibility. In this capacity it is important for the activities to embody the values and examples consistent with the core of the EMP. The Shire must integrate EMP objectives into routine operations, and then document how these have been successful, or conversely where practice has identified need for reconsideration.

Embedding best-practice environmental management involves areas such as ranger services (e.g., fire management), asset construction and maintenance (e.g., climate-resilient road and drainage designs), and land-use planning approvals (e.g., mandatory water-sensitive urban-design measures and weed management). Providing clear procedures, staff training and performance indicators aligned to the EMP will shift environmental stewardship from 'special project' to everyday business. It requires careful thought, consultation, training, induction and reporting.

Regulate

This is a direct method of introducing reformed practices and standards. As the local regulatory authority, the Shire can shape environmental outcomes by enforcing State legislation and local laws covering waste handling, pollution, litter, noise, animal management and planning compliance.



Regulation by itself is not as powerful in changing practices unless it can be combined with good communication, training and feedback. Enforcement can be at first instance an opportunity to intercept and correct poor environmental practices by explaining the reasons and need for improvement and compliance with better standards.

Facilitate

The facilitate role involves removing barriers, brokering partnerships, and providing technical assistance to help community groups, businesses, and landholders deliver projects aligned with EMP goals. This means making better environmental practices the preferred and easier option. The Shire can advocate for changes by influencing others, as many improvements are outside its direct control.

Facilitation requires providing information and resetting traditional mindsets to embrace innovation and question unsustainable practices. Activities like offering workshops on weed management or coordinating citizen-science monitoring platforms will gradually build a culture of volunteers contributing credible biodiversity data. The Shire can foster this shift by serving as a central point for coordination, assistance, and advice, streamlining efforts and enhancing community capacity.

Advocate

The Shire needs to address issues beyond local government scope in a whole-of-government context, such as waste treatment, marine biosecurity, species conservation, biodiversity, and habitat funding. The EMP should identify meta-areas impacting the Shire of Broome's capability to achieve results (often competing with broader contextual challenges). This includes setting advocacy priorities, creating strong business cases, and assigning lobbying tasks to elected members or senior officers. Objectives include securing grants, influencing state policies, and developing inter-agency action plans that address Broome-specific risks.

Partner

Environmental management in Broome benefits from collaboration between a wide range of stakeholders, including Traditional Owners, pastoral stations, government land managers, and research organisations. These partnerships provide opportunities for knowledge sharing, coordination, resulting in informed decision-making. Regional collaboration across the Kimberley also has potential to enhance outcomes, particularly where cross-boundary issues such as invasive species, fire regimes, and coastal processes are involved. Working together at this scale can help identify opportunities for efficiencies and shared learning.

Progress in partnership approaches can be observed through examples such as joint projects, incorporation of Traditional Ecological Knowledge, or coordinated data collection. While responsibility for specific actions sits with individual organisations, the Environmental



Management Plan (EMP) highlights the value of maintaining constructive relationships and exploring opportunities for collaboration where they arise.



3 Scope & Methodology

This section describes the boundaries, frameworks, data sources and quality considerations used to assemble the 2025 State of the Environment (SoE) update and accompanying Environmental Management Plan (EMP) for the Shire of Broome.

3.1 Scope

The project and its terms are summarised in the table below.


Temporal boundary	Comparison of environmental conditions and management responses for the period between the 2016 baseline and the 2025 snapshot.
Geographic boundary	Includes entire Shire of Broome
Seven Themes:	Land Management; Biodiversity; Water Resources; Coastal Environments; Waste Management; Energy & Emissions; and Climate Change.

3.2 Approach

For the 2025 update, the assessment was not based solely on new technical surveys or remote-sensing data. A wide-ranging consultation process was undertaken, supported by a review of relevant literature, official Shire documents, and available research analyses to determine changes over the past decade.

Input was drawn from key stakeholders, local government reports, and both academic and community-generated resources. For example, the updated assessment of shorebird habitat health incorporates findings from the Broome Townsite Shorebird Monitoring Program (2024), which indicate that shorebird counts have either stabilised or improved at four of the five key survey sites now managed jointly with Traditional Owners. This consultative and analytical process provided the basis for informed judgments on improvements across a suite of environmental indicators.

Data Quality & Confidence Ratings



Rather than collecting new technical data, this report draws on existing datasets collected over recent years. The data have been reviewed, updated, and assessed (as far as possible) to ensure reliability and consistency with previous reporting.

The assessment process included the following steps:


- **Consultative Synthesis:** Information was cross-checked from diverse sources, including government reporting, regional monitoring programs, and independent research projects.
- **Updated Metrics:** Key environmental indicators, such as shoreline movement and vegetation cover, were recalibrated using higher-resolution datasets accessible via official data portals. While new sensor surveys were not carried out, the analysis ensured comparability of trends over time. While no new field surveys were conducted, the revised metrics allow for continued tracking of long-term trends.
- **The suite of indicators was reviewed and updated** to reflect emerging environmental issues and changes in available information. Where possible, this included incorporating additional measures to capture broader environmental trends, such as climate extremes, land use changes, and the outcomes of management activities.
- **Confidence Assessment:** Each thematic area was assigned a confidence rating (High/Medium/Low) based on the reliability of data reporting, the consistency of information sources, and the frequency of such reporting. Known limitations, including data gaps in remote areas or biases stemming from community-collected feedback, remain influential on some measures.

This approach supports a transparent, adaptive framework for environmental reporting, allowing for improvements as new information becomes available.

3.3 *Change assessment summary tables*

The tables that follow provide a side-by-side comparison of key environmental and operational metrics for the Shire of Broome, showing where assessment was rated in 2016 versus 2025 assessment. By presenting both a “Baseline” and a “Snapshot,” the tables illustrate how various programs, policies and natural-resource dynamics have driven change over the nine-year period. This structure allows readers to see not only what was measured in 2016 and what it looks like now, but also to gauge the direction and relative confidence of those changes before diving into the detailed data.

- **Indicator:** The specific topic or metric being tracked (e.g., Planning coverage, Renewable penetration, Landfill capacity). Each indicator isolates one aspect of Shire performance or ecosystem health.
- **2016 Baseline:** A concise description of the indicator’s status as of 2016. This column establishes the starting point for comparison, highlighting existing conditions, policies in place or data limitations at that time.

- 
- **2025 Snapshot:** A concise description of the indicator’s status as of 2025. It summarizes outcomes of new strategies, investments or observed trends—essentially showing what has changed since 2016.
 - **Trend (▲, ►, ↔):** A visual arrow showing whether the 2025 condition represents an improvement (▲), little or no net change (► or ↔), or a decline (▼) relative to 2016.
 - **Rating** (Very Good, Good, Moderate, Fair, Poor): A qualitative assessment of the 2025 status against best-practice benchmarks or policy goals. This reflects how well the Shire is performing on that indicator today.
 - **Confidence Rating:** Indicates the level of confidence in the 2025 Rating. “High” denotes robust data sources and methods; “Medium” or “Low” indicates gaps or uncertainties.
 - **Confidence Trend:** Indicates the confidence in the direction shown by the Trend arrow. “High” means there is strong data and analysis to support the assessed improvement (or lack thereof); “Medium” or “Low” suggests further verification may be required.



4 Land Management

The Shire of Broome contains a variety of ecosystems, including pindan woodlands, monsoon vine thickets, and mangrove-lined creeks. These landscapes play a vital role in the region's environment, culture, and economy. For Traditional Owners, they are deeply connected to their culture and way of life.

Landscapes such as pindan woodlands and monsoon vine thickets provide habitat for iconic and threatened fauna including bilbies and spectacled hare-wallabies, while also supporting seasonal bird migrations and culturally significant bush foods. Mangrove corridors play an important role in climate resilience, helping to sequester carbon and support coastal food webs. These environments not only shape Broome's natural character but also attract hundreds of thousands of visitors each year, contributing to the town's tourism economy.


Yet Broome's terrestrial assets face persistent and growing pressures. The 2016 State of the Environment (SoE) Report identified landscape degradation resulting from late-season wildfires, weed infestations, and fragmented governance. Outdated vegetation mapping, minimal erosion monitoring, and inconsistent application of ecological fire practices constrained effective land management. Stakeholders also noted limited coordination between agencies and a lack of formal engagement structures with Traditional Owners.

Since 2016, some progress has been made in land management across the Shire of Broome. A Weed Management Strategy was formally adopted in 2023, prioritising 36 invasive species and coordinating on-ground control measures. However, issues with the implementation of the strategy meant that it has since been reviewed and is scheduled for publication in FY26. This will provide greater clarity around responsibilities, timeframes, and performance measures for weed management.

Early-dry-season mosaic burning has also become more common across the region, reflecting both traditional fire practices and contemporary fire management approaches that deliver improved ecological outcomes. These practices help reduce wildfire risk while maintaining biodiversity values.

In the planning space, Water-Sensitive Urban Design (WSUD) has long been a requirement in Broome's development standards. This principle was reinforced through the establishment and implementation of the Structure Plan and Subdivision Local Planning Policy and in the 2024 amendments to the Local Planning Strategy, which now strengthen integration of WSUD into subdivision approvals. Engineering designs in Broome North have demonstrated practical stormwater treatment techniques, showing how urban development can adapt to local soil, climate, and water conditions.

Despite these gains, many of the structural challenges identified in 2016 remain unresolved. The Shire withdrew the Significant Tree Register Policy in 2017 due to lack of statutory weight. Weed



coverage continues across utility corridors and rangeland. Drainage systems in older suburbs remain vulnerable to flooding and sediment export, and no landscape-scale bushfire plan has been implemented for Shire-managed land.

Consultation in early 2025 confirmed community frustration with the pace of change. Stakeholders cited under-resourcing of on-ground weed control, tokenistic engagement processes, and limited environmental leadership. The absence of an Environmental Advisor within the Shire was repeatedly raised, as was the need for stronger transparency and accountability in land-related decision-making.

Going forward, the challenge lies in transitioning from strategic intent to coordinated implementation. This will require not only technical expertise and reliable spatial data, but also clear governance, enduring partnerships, and sustained investment.


4.1 DBCA Managed Lands and Conservation Areas

The Shire of Broome contains several areas of high conservation value that are managed in partnership between the Department of Biodiversity, Conservation and Attractions (DBCA) and Yawuru RNTBC. These conservation lands protect biodiversity, cultural heritage, and recreational opportunities, while also playing a critical role in maintaining ecological processes across the Broome region.

Key terrestrial reserves include Yawuru Birragun Conservation Park and Yawuru Minyirr Buru Conservation Park, which encompass important cultural landscapes, coastal dunes, and woodland habitats. These areas are co-managed with the Yawuru Traditional Owners, recognising the deep cultural connections to Country and ensuring that land management reflects both ecological and cultural priorities. Further north, Guniyan Binba Conservation Park manages the intrinsic links between the marine and terrestrial ecosystems along a valuable coastline. Together, these conservation parks form a connected network of managed land that safeguards ecological resilience while also offering opportunities for education, recreation, and tourism.

Marine environments are represented through the Yawuru Nagulagun / Roebuck Bay Marine Park, which is of national and international importance. Roebuck Bay supports vast intertidal mudflats that provide critical feeding grounds for migratory shorebirds protected under international agreements such as JAMBA, CAMBA, and the Ramsar Convention. The marine park also protects seagrass meadows, mangrove systems, and marine fauna including dugongs, dolphins, and turtles. The collaborative management of this marine park reflects both the ecological importance of the bay and its cultural significance to the Yawuru people.

Together, these DBCA managed lands contribute to the Shire's environmental sustainability by conserving biodiversity, protecting water quality, and storing carbon, while also underpinning the region's tourism economy and cultural identity. Ongoing challenges include managing visitor pressures, fire regimes, invasive species, and climate change impacts such as rising sea levels



and coastal erosion. Strong partnerships between DBCA, Yawuru, the Shire of Broome, and community stakeholders will remain essential to maintaining the health and resilience of these conservation areas into the future.

The extent of DBCA-managed lands is provided in the figures below. The Figure also shows:

- Marine and Conservation Parks within the Shire;
- Pastoral Leases managed by leaseholders.

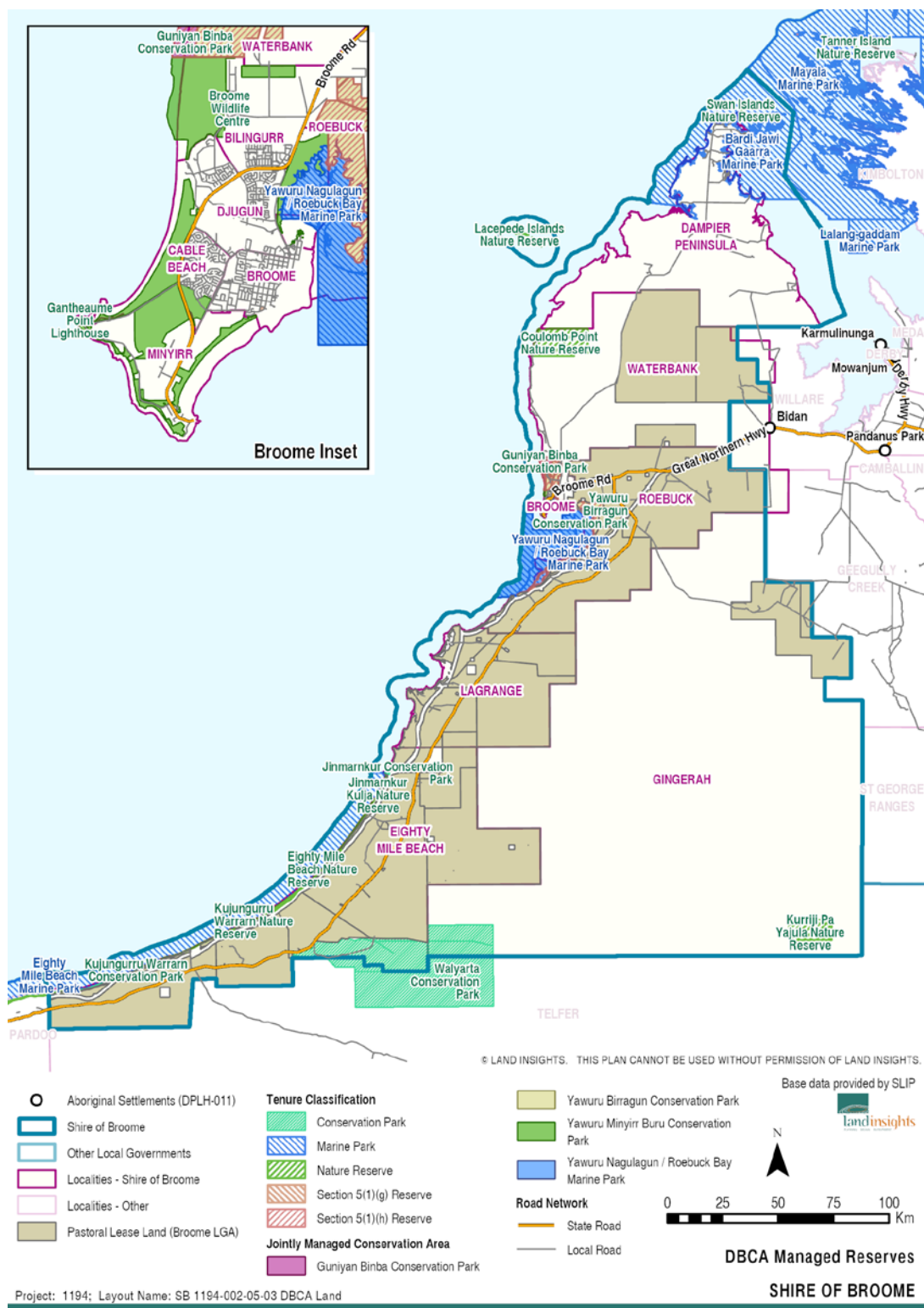


Figure 4.1 - DBCA Managed Reserves

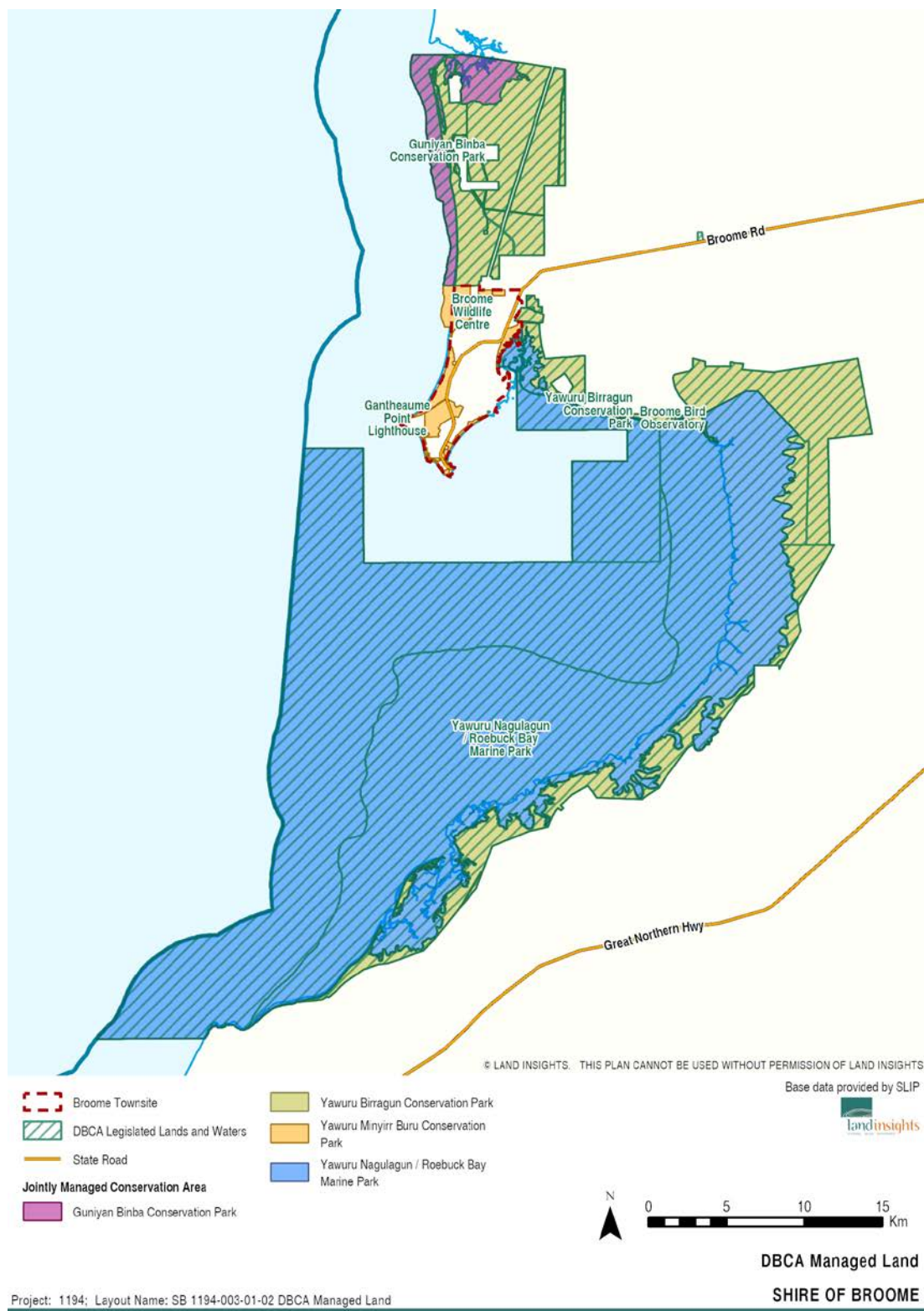


Figure 4.2 Yawuru Conservation Estate



4.2 *Dinosaur Tracks: Management*

The Dinosaur Tracks map below illustrates the underlying landforms and sedimentary units that shape this unique coastline, including Broome Sandstone, Holocene dune systems, calcarenite formations, and conglomerates. These formations not only hold scientific and cultural significance but also influence coastal processes such as erosion, accretion, and tidal inundation.

The management of dinosaur tracks is promoted by the Dinosaur Coast Management Group (DCMG) in collaboration with Traditional Owners, researchers, and the community. The DCMG works to protect track sites from damage, promote awareness through education and tourism initiatives, and advocate for conservation within broader coastal management frameworks. Pressures on these fossil-bearing units include natural weathering, storm surge, rising sea levels, and increasing recreational use of the intertidal zone.

While the Shire manages parts of Cable Beach and Gantheaume Point for public access, adjacent intertidal zones fall under various tenure, such as the Yawuru Conservation Estate and the Kimberley Ports Authority reserve. The map underscores the importance of collaboration through the Dinosaur Coast Management Group (DCMG), which brings together Traditional Owners, government agencies, and the community to safeguard the trackways. Management priorities include regulating visitor access to sensitive track sites, preventing physical damage, monitoring erosion, and promoting education and cultural interpretation.

By identifying which units are more exposed to erosion or coastal change, the map supports the work of the Dinosaur Coast Management Group (DCMG), who promote protection and awareness programs. This includes managing risks from natural weathering, sea-level rise, and human activity, while promoting the tracks as a globally significant scientific and cultural asset.



Figure 4.3 Dinosaur Coastal Management



4.3 2016 Situation

The 2016 State of the Environment Report for the Shire of Broome highlighted the Dampier Peninsula as an area of significant cultural and environmental value, characterised by extensive tracts of intact native vegetation. This landscape not only underpins biodiversity conservation but also sustains Traditional Owner practices, pastoral activity, tourism, and recreation.

At the time, several challenges to effective land management were identified. A central issue was the question of land tenure, as most land across the Shire is formally vested in the State Government. This arrangement created complexity in local governance and limited the ability of the Shire and other local stakeholders to influence land use and conservation outcomes directly. Instead, management responsibilities were spread across multiple State agencies, Traditional Owner organisations, and leaseholders, resulting in fragmented governance and, at times, inconsistent land management practices.

Other challenges included gaps in spatial data, particularly in mapping vegetation condition and land use change, which constrained the ability to plan proactively. Operational responses tended to be reactive rather than strategic, with pressures such as unmanaged access, weeds, fire, and development proposals often being addressed in isolation. The combination of tenure complexity, data limitations, and fragmented oversight was identified as a barrier to achieving integrated, long-term land management across the Shire.

Spatial Data and Landscape Condition

The report highlights that land management efforts were hindered by outdated and low-resolution spatial datasets. The most commonly used vegetation map at the time was derived from the 1:250,000 scale Dampier land dataset, published in 1999. While this provided a general bioregional overview, it was insufficient for property-scale planning or targeted ecological restoration. Similarly, the report notes that available mapping of erosion risk and invasive species distributions was limited in resolution. Weed mapping was described as being focused primarily on sealed road corridors, where species such as *Cryptostegia grandiflora* (rubber vine), *Azadirachta indica* (neem), and *Parkinsonia* spp. had been recorded. However, large parts of the Shire—particularly remote rangelands and coastal dunes—had not been comprehensively surveyed.

Fire Management and Operational Practices

Under the “Fire Control” section, the report characterises fire management within the Shire as largely reactive in nature. Fire was primarily used for asset protection, such as burning along road verges and around pastoral infrastructure. The report states that planned to burn for ecological outcomes (such as the creation of patchy fuel mosaics to reduce fire intensity and promote biodiversity) was limited. As such, fire management was not guided by a landscape-scale ecological fire strategy.



Governance and Institutional Arrangements

The report outlines the division of responsibilities for land management across multiple agencies. Crown land was managed by various State Government departments, including the Department of Parks and Wildlife (now DBCA) (conservation reserves under the CALM Act 1984), UCL and Aboriginal Lands Trust land by DPLH as well as pastoral leases through the Pastoral Lands Board, and the Shire was responsible for local regulations including off-road vehicle use and litter control. Engagement with Traditional Owners was noted to have occurred mainly on a project-by-project basis without overarching governance structures.

4.4 2025 Situation

Between 2016 and 2025, Broome's land management landscape has undergone a series of incremental changes. While several new strategies and planning instruments have been formally adopted (most notably in weed control and subdivision design) community feedback collected in 2025 indicates that many longstanding pressures remain unresolved. Concerns raised by local groups, Traditional Owners, and stakeholders point to continued gaps in governance, environmental protection, and operational delivery. At the same time, some policy-level improvements have been made, particularly through the formalisation of weed management objectives, planning amendments to support WSUD, and the ongoing implementation of joint-management arrangements. The following sections summarise community feedback and recent institutional changes, along with their current effectiveness.

Community and Stakeholder Feedback

Significant Tree Protection


Community members expressed concern about the withdrawal of the Significant Tree Register (STR), which had previously been considered as a tool for identifying and protecting large or culturally important trees. The mechanism was formally put forward to Council at the annual electors meeting in February 2025 however, Council continues to consider the best framework for implementing a significant tree register. . In the absence of the STR, no alternative mechanism has yet been documented to safeguard mature vegetation during development approvals.

Clearing and Development Impacts

Stakeholders reported that total site clearing prior to construction remains common in new developments. Observations included inadequate post-clearing controls, such as erosion prevention and weed containment. Several participants noted similar issues arising from clearing by State agencies around infrastructure corridors, often without accompanying remediation.

Stormwater and Drainage Deficiencies

Feedback highlighted contrasts between older and newer urban areas. Earlier neighbourhoods relied on wide verges and swales to encourage infiltration, while recent subdivisions have adopted



kerbed systems that direct runoff to drainage channels. Persistent flooding in Chinatown and Town Beach was raised as evidence of limited progress in applying WSUD retrofits to legacy developments.

Weed Management Shortfalls

Community land-care groups noted that although mapping and prioritisation of invasive weeds have improved, actual on-ground control remains inconsistent and under-resourced. Buffel grass and neem were specifically identified as species continuing to spread, particularly in areas lacking consistent Shire oversight.

Governance and Leadership Gaps

Several members of the community expressed a desire for the Shire to enhance its capacity to address environmental concerns. Suggestions included appointing a dedicated Environmental Advisor to provide expert guidance, improving transparency around decision-making processes, and ensuring consultation efforts are meaningful and inclusive. These measures were seen as vital to elevating the environment as a priority within local government functions.

Currently, the Shire does not have a dedicated Environmental Advisor, and environmental functions and responsibilities are distributed across multiple departments.

Weed Management

The Shire is currently in the process of reviewing and updating their Weed Management Strategy and Action Plan which outlines Shire-wide objectives for controlling invasive species, with a focus on prevention of new infestations, systematic mapping and monitoring, improved coordination of community and volunteer efforts, and better alignment of internal resources. The strategy represents a shift from the draft-level frameworks of 2016 to a formally endorsed plan supported by the Shire's operating budget.

However, while the strategy has improved clarity around priorities and coordination, community feedback suggests that on-ground control efforts remain under-resourced. Suitable biodiversity balance continues to struggle with invasive weeds continuing to spread through utility corridors and under-managed areas.

Stormwater Management and Sensitive Urban Design (WSUD)

WSUD principles are embedded in Local Planning Policy 5.22 – Structure Plan and Subdivision Standards. Originally adopted in 2015 and updated in 2017 and 2018, this policy applies to greenfield subdivisions and requires inclusion of measures such as swales and vegetated buffers to manage runoff. These provisions have influenced stormwater management in newer areas such as Broome North. Legacy urban areas developed prior to these policy standards, including Town Beach and Chinatown, retain conventional drainage systems and remain subject to historical design limitations.



Tree Protection Mechanisms

As of early 2025, there was a motion put forward at the annual electors meeting in February to reinstate the Significant Tree Register (STR). In the past, the register helped to identify and support the protection of large or culturally significant trees, including endemic coastal gums, across the Shire. Opportunities remain within the planning framework to consider alternative approaches for vegetation protection although at present, there is no other statutory overlay or heritage listing mechanism that specifically addresses mature vegetation on development sites. The need for improved measures to recognise and protect significant trees was raised as an area of interest during recent community consultation. The Shire's Council is currently considering an appropriate framework for identification and protection of significant trees.

Bushfire Planning and Joint Management

Joint management arrangements between the Department of Biodiversity, Conservation and Attractions (DBCAs) and the Yawuru Registered Native Title Body Corporate (RNTBC) continue to guide environmental management across parts of the Yawuru Conservation Estate, including Minyirr Buru. These arrangements support ecological fire regimes and other land stewardship activities.

As of mid-2025, the Shire has not adopted a landscape-scale bushfire management plan for Shire-managed land. Fire management activities remain focused on localised asset protection, such as firebreak maintenance and verge fuel reduction.

Overall Status (Mid-2025)

Since 2016, the Shire of Broome has made progress in several strategic areas, particularly in weed management planning and subdivision design standards. However, longstanding challenges remain in vegetation protection, stormwater infrastructure, fire management, and organisational capacity. Sediment levels flowing into Roebuck Bay have not shown a clear reduction, invasive weeds continue to spread, and gaps in governance persist. The community is increasingly seeking practical action, calling for not only policy development but also visible implementation, transparency, and accountability.

Fire management has been a focus of activity, with Aboriginal ranger groups such as the Bardi Jawi, Karajarri, and Nyul Nyul Rangers taking a stronger role. These groups have been active in early dry-season mosaic burning, combining traditional knowledge with contemporary fire management practices. More recently, the Bindan Djak Rangers have been established, further strengthening community-led ecological fire management across the region.

The future of land management in the Shire will depend on the level of operational funding, staffing, and cooperation between agencies. Community consultation has highlighted the need for stronger vegetation protection, and the Shire's ability to meet these expectations will rely on how priorities are set and resources are allocated.



4.5 *Change Assessment Summary*

Indicators combine quantitative datasets and community/stakeholder evidence. Confidence expresses evidence strength (High / Medium / Low).

Table 4.1 - Indicators (Land Management)

Indicator	2016 Baseline	2025 Snapshot	Trend	Confidence in Trend	Rating	Confidence in Rating
Remnant Vegetation Extent	Pindan woodlands, Monsoon Vine Thickets and endemic coastal-gum communities were already identified as vulnerable, with urban expansion and over-clearing contributing to loss. Monsoon Vine Thickets were listed as Endangered under the <i>Environmental Protection and Biodiversity Conservation Act</i> (EPBC).	Continued loss of remnant vegetation at development frontiers. Significant Tree Register withdrawn due to lack of statutory powers No measurable reduction in sediment loads entering Roebuck Bay suggests ongoing vegetation removal.	▼	High	Poor	Medium
Weed Infestation Extent	Weed mapping was limited mainly to sealed road reserves; infestations noted around new developments. No coordinated, Shire-led mapping or control beyond regional plan templates.	Shire-wide Weed Management Strategy adopted (2023), with systematic mapping and volunteer involvement. However, on-ground control remains under-resourced and weeds (e.g. buffel grass, neem) continue to spread across Shire land and utility corridors.	—	Medium	Poor	High

Indicator	2016 Baseline	2025 Snapshot	Trend	Confidence in Trend	Rating	Confidence in Rating
Stormwater Management Effectiveness	Older areas used wide verges and swales for infiltration; newer subdivisions already starting to rely on kerbed, channelled drains that discharged directly into coastal waters. Overall stormwater design was inadequate, causing local erosion and flooding.	New subdivisions (e.g. Broome North) incorporate WSUD elements (swales, infiltration basins). Existing urban areas (Chinatown, Town Beach) remain susceptible to flooding and sediment export, as Shire-wide retrofits have not been implemented.	—	Medium	Fair	Medium
Protection of Significant Trees	A Significant Tree Register (STR) existed, offering at least a nominal mechanism to identify and protect large or culturally important specimens (e.g. coastal gums).	STR has been withdrawn; no replacement or heritage overlay exists. Mature and culturally significant trees remain at risk during development.	▼	High	Poor	High
Erosion & Sediment Loads into Waterways	Erosion in areas of urban expansion and insufficient vegetated buffers has contributed to increased sediment discharge into Roebuck Bay and its catchments (Shire of Broome 2016; RBWG 2009; URBIS 2021). Elevated sediment loads, vegetation removal and limited upgrading of existing stormwater systems have been identified by stakeholders as ongoing concerns (Shire of Broome 2016, p. 24).	High sediment loads, removal of vegetation and lack of retrofitting existing stormwater has been expressed as concern by stakeholders.	—	Medium	Poor	Medium

Indicator	2016 Baseline	2025 Snapshot	Trend	Confidence in Trend	Rating	Confidence in Rating
Bushfire Management Coordination	Joint ranger programs (Yawuru/DPaW/Shire) existed, but there was no Shire-led, landscape-scale fire management framework. Fire control resources were adequate but lacked overarching strategic direction.	Joint-management continues for adjacent conservation parks, but Shire still does not have a dedicated, town-wide bushfire management plan. Existing arrangements remain functionally unchanged.	—	Medium	Fair	Medium
Shire Governance & Capacity	Shire had no Environmental Advisor, limited internal expertise, and relied on regional templates. Land-use oversight was fragmented, with environmental issues often sidelined in favour of infrastructure and sport.	No Environmental Advisor appointed as of mid-2025. Environmental programs administered by relevant staff throughout organisation.	—	High	Fair	High

5.6 EMP Actions (2025-2035)

Objective

Protect and restore Broome's native landscapes by retaining and enhancing vegetation, controlling invasive species, safeguarding significant trees and priority ecological communities, and embedding best-practice land-use standards, capacity-building and collaborative partnerships to ensure resilient, sustainable land management across the Shire.

Table 4.2 – EMP Actions (Land Management)

Action	Timeframe	Priority	Shire Role	Rationale	Responsible Officer	Predicted Resourcing Requirements	Proposed Partnerships	Linked Strategies
1.1 Partner with DBCA and Yawuru RNTBC to implement the Minyirr Buru and Guniyan Binba Management Plans and meet the key performance indicators.	Ongoing	High	Partner; Facilitate	Shire of Broome has adopted/endorsed both the Minyirr Buru and Guniyan Binba Management Plans. Both are under the joint management of the Shire of Broome and Yawuru RNTBC with DBCA providing an operational service through the Area Agreement within the Yawuru ILUA. Maintaining strong partnerships with Yawuru RNTBC and DBCA is crucial to the ongoing management of these important conservation parks.	Land Tenure Officer	Internal	DBCA & Yawuru RNTBC	Minyirr Buru Management Plan; Guniyan Binba Management Plan; Yawuru Cultural Management Plan.

Action	Timeframe	Priority	Shire Role	Rationale	Responsible Officer	Predicted Resourcing Requirements	Proposed Partnerships	Linked Strategies
1.2 Advocate and support Aboriginal Corporations and communities in securing land tenure outcomes that will create improved environmental oversight and indigenous led land management opportunities and in the absence of land tenure changes, advocate for the State Government to appropriately manage the land.	Ongoing	High	Advocate; Facilitate	Besides Broome townsite, much of the tenure throughout the Shire is comprised of Aboriginal Lands Trust land or Unallocated Crown Land with Native Title Rights and Interests. The Shire recognises the indigenous cultural and environmental knowledge that contributes to improved land management. Though the Shire is not capable of divesting land management responsibilities directly to Aboriginal Corporations and Native Title holders, it will provide support through appropriate measures to help facilitate this transfer of land from the State Government.	Land Tenure Officer and Manager of Planning and Building.	Internal	Aboriginal Corporations and Communities	Council Plan 2025-2035
1.3 Facilitate improved management of the dinosaur trackways and consistent messaging of their	Ongoing	Medium	Advocate; Facilitate	The Dinosaur Coast Management Group has been developing the Dinosaur Coast National Heritage Management Plan for several years now, in consultation with the Shire of	Land Tenure Officer	Internal	Dinosaur Coast Management Group; Yawuru RUNTBC; DBCA;	Local Planning Strategy 2023

Action	Timeframe	Priority	Shire Role	Rationale	Responsible Officer	Predicted Resourcing Requirements	Proposed Partnerships	Linked Strategies
values, through engagement with key stakeholders.				Broome and other stakeholders. Engagement has been ongoing, especially around the parameters of the management plan and which areas it applies to. The Shire has considered various iterations of the draft plan but is yet to adopt due to potential impacts the plan may have on other projects that have significant community and economic benefits that have avoided interaction with dinosaur footprints. Nevertheless, the Shire is committed to ensuring the dinosaur trackways are protected and awareness raised of their scientific and cultural importance.			Kimberley Port Authority	
1.4 Facilitate improved environmental oversight through establishing a State	2026	High	Provide	Community respondents highlighted governance gaps and limited environmental leadership. Rather than creating a single new position, a more	Land Tenure Officer	Internal		

Action	Timeframe	Priority	Shire Role	Rationale	Responsible Officer	Predicted Resourcing Requirements	Proposed Partnerships	Linked Strategies
of the Environment technical advisory group that monitors and reports on actions within the EMP.				<p>effective approach is to recognise that environmental responsibilities already extend across multiple teams, including planning, infrastructure, waste management, and community engagement.</p> <p>To address this, the establishment of an internal Environmental Technical Advisory Group is recommended. Comprised of existing staff with expertise in relevant areas, this group would provide coordinated oversight, embed technical knowledge into decision-making, and strengthen governance processes. This collaborative model ensures that environmental considerations are integrated across all Shire functions while building on existing capacity.</p> <p>Updates can be provided to Council during workshops and</p>				

Action	Timeframe	Priority	Shire Role	Rationale	Responsible Officer	Predicted Resourcing Requirements	Proposed Partnerships	Linked Strategies
				feedback and notes published to community.				
1.5 Provide a Weed Management Strategy Action Plan in alignment with the 2025 Weed Management Strategy.	2026-2027	High	Fund; Provide; Regulate; Partner	In 2016, weed mapping was largely limited to sealed road reserves with no coordinated Shire-led program. By 2025, stakeholders reported that on-ground efforts remain under-resourced, and infestations continue to spread. The provision of a strategic weed management plan will support Shire led initiatives to address this significant environmental issue.	Manager Operations	Internal	DBCA; Yawuru RNTBC	
1.6 Provide a Shire-wide Bushfire Risk Management Plan.	2026-2027	Medium	Fund; Provide; Regulate; Partner	The 2016 SOE noted that, although joint ranger programs existed, there was no Shire-led, landscape-scale fire management framework. In 2025, interviewees confirmed no change, leaving risk of uncontrolled fires and biodiversity loss. A bushfire risk management plan will improve	Manager Environmental Health, Emergency and Rangers	100% funded through DFES	DFES	Risk Management Plan - Strategic Risks (2022)

Action	Timeframe	Priority	Shire Role	Rationale	Responsible Officer	Predicted Resourcing Requirements	Proposed Partnerships	Linked Strategies
				knowledge and understanding of community, cultural, natural and economic assets at risk of bushfire hazards and where appropriate treatments can be implemented.				
1.7 Provide a baseline assessment of significant trees on public land and establish tree register.	2026-2030	High	Provide; Regulate; Fund	<p>In 2016, the Shire maintained a Significant Tree Register to identify and protect mature and culturally important specimens (e.g., coastal gums). By 2025, the register had been withdrawn, due to lack of statutory powers.</p> <p>Council is currently considering an Annual Elector Motion which sought to reinstate a Significant Tree Register. Implementing a STR that has statutory weight in the planning scheme is not a favoured outcome and it is not an approach recommended by WALGA. WALGA have developed a model Local Planning Policy on tree retention and the Shire is currently investigating options to</p>	Manager Environmental Health, Emergency and Rangers	Internal	Yawuru RNTBC; Community Environmental Groups; DBCA	

Action	Timeframe	Priority	Shire Role	Rationale	Responsible Officer	Predicted Resourcing Requirements	Proposed Partnerships	Linked Strategies
				undertake a baseline assessment of significant trees on public land.				
1.8 Facilitate a review of the Shire's spatial mapping information with regards to weeds, heatmapping, significant trees and other key environmental priorities.	Ongoing	Low	Facilitate	Spatial mapping is key to understanding and acquiring important data on environmental matters affecting the community. A comprehensive GIS mapping system that captures this data and an ability to easily dispense this information publicly will provide greater awareness and transparency on environmental matters. Strategic documents the Shire is developing or planning i.e., Weed Management Plan, District Stormwater Management Plan, will require comprehensive GIS support to implement many of the actions.	Manager Planning and Building and Manager of Operations	Internal	State Government	





5 Biodiversity

5.1 Background

The Shire of Broome encompasses a wide diversity of ecosystems, ranging from pindan woodlands and monsoon vine thickets to coastal mangroves, claypans, and Ramsar-listed intertidal mudflats. These systems provide habitat for species of national and international significance, including spectacled hare-wallabies, bilbies, seagrass-dependent fauna, and more than 700,000 migratory shorebirds each year. Biodiversity in Broome also holds deep cultural significance for the region's Traditional Owners, whose identity, law, and well-being are intrinsically connected to Country. Native species and habitats support a growing bushfood enterprise sector, contribute to the local tourism economy and scientific research, and provide essential ecosystem services such as carbon storage, pollination, and coastal protection.


In 2016, the State of the Environment Report described overall habitat condition as “very good,” but noted early signs of degradation. Pressures included invasive weeds such as neem and rubber vine, late-dry-season wildfires, the encroachment of development into vine thicket margins, and predation by feral cats. At that time, formal reserve coverage for Threatened Ecological Communities (TECs) was low (approximately 1%) and biodiversity data was fragmented across separate research initiatives. The report recommended the development of a Shire-wide Biodiversity Management Plan and closer coordination with Traditional Owners and State agencies.

Since then, the policy and planning framework has evolved. The Biodiversity Conservation Act 2016 (WA) modernised the listing and protection of threatened species and ecological communities. Within the Shire, advances have been made on planning for the conservation estate established through the Yawuru Indigenous Land Use Agreement (2011), under which the Shire became a joint manager of Minyirr Buru Conservation Park (management plan published in 2018) and Guniyan Binba Conservation Park (management plan published in 2020).

Beyond these, other significant conservation areas have been declared, including the Roebuck Bay Marine Park (revised zoning 2023, new Joint Management Agreement 2024), the Yawuru Indigenous Protected Area (2021), and the Mayala Indigenous Protected Area (2024).

It should be noted that these are not Shire-managed lands, however collectively these additions have increased the extent of land and sea country under formal conservation management across the region. There remain some challenges in ensuring adequate resourcing, improving data integration, and coordinating across the multiple Traditional Owner groups, agencies, and stakeholders involved in biodiversity management throughout the Shire.

Citizen science participation has also expanded, with eBird records submitted from the Broome region increasing from 6,150 (2009–2018) to over 41,000 (2019–2024), improving the data available for bird population trends. On-ground partnerships led by groups such as the Society for



Kimberley Indigenous Plants and Animals (SKIPPA) have supported invasive-species control and native plant restoration.

Despite these advancements, recent engagement findings indicate that biodiversity pressures have persisted or worsened in several areas. Community survey data from early 2025 showed that only 1% of respondents felt there had been “significant progress” on biodiversity protection since 2016, while over half reported “no change” or “a decline.” Key concerns included ongoing vegetation clearing and reduced Shire environmental staffing. Feedback from Traditional Owner groups emphasised the need for co-governance and the integration of cultural burning practices. The Shire’s planning framework seeks to recognise and conserve culturally significant areas and to support the land management aspirations of Traditional Owner groups through appropriate land reservations and strategic planning measure.

This chapter reviews changes to Broome’s biodiversity from 2016 to 2025, using updated monitoring data, policy developments, and community consultation. It provides a factual basis for evaluating progress and identifies opportunities to consolidate gains, strengthen governance, and embed adaptive management into the Shire’s planning and operations.

Threatened Ecological Communities

The map of Threatened and Priority Ecological Communities (TECs and PECs) highlights the significant biodiversity values located within and adjacent to the Broome townsite. Key ecological communities include coastal dune vegetation, pindan woodland, and mangrove systems, particularly around Minyirr, Bilingurr, and Roebuck within the townsite and extensive areas exists through the broader Shire. These communities provide critical habitat for flora and fauna, act as buffers protecting the coast from erosion, and hold cultural importance to Traditional Owners.

Conservation challenges arise from the proximity of these ecological communities to areas of urban expansion, infrastructure corridors, and recreational zones. Disturbance from development, invasive species and hydrological changes pose ongoing threats to their ecological condition.

State-level recognition of these communities as ‘Threatened’ or ‘Priority’ under biodiversity conservation legislation ensures that they receive attention during land-use planning and environmental assessment processes.

At the local level, the Shire’s responsibility lies in integrating these mapped areas into planning controls, ensuring that development proposals avoid or mitigate impacts. Ongoing collaboration with Yawuru, the Department of Biodiversity, Conservation and Attractions (DBCA), and community stakeholders is vital to maintaining the ecological integrity of these communities. Their protection directly contributes to the Shire’s broader objectives of biodiversity conservation, cultural heritage recognition, and sustainable land management.

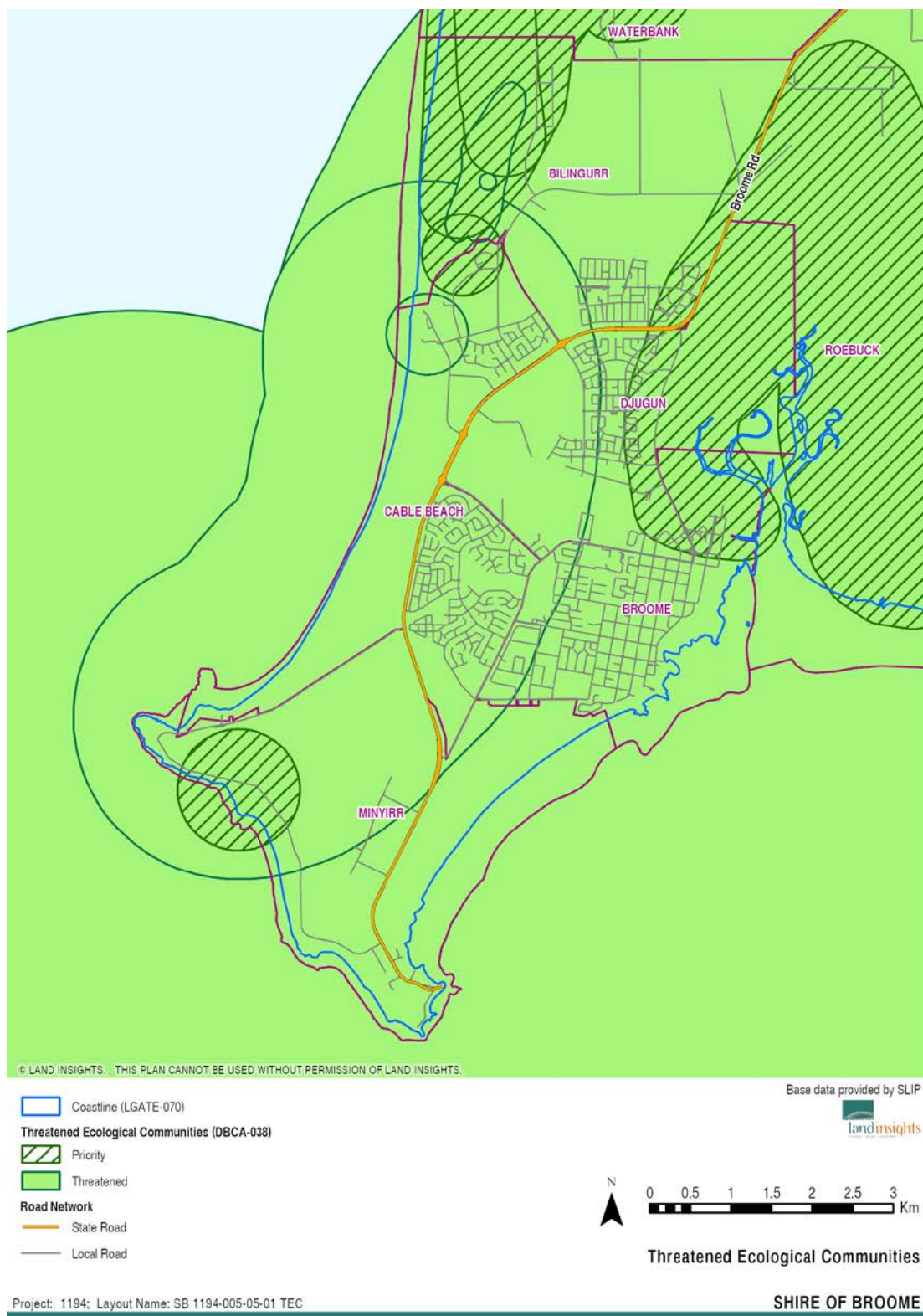


Figure 5.1 Threatened Ecological Communities



Dampier Peninsula Vegetation Cover 2016–2022

Vegetation cover is a critical indicator of ecological health, influencing biodiversity, soil stability, hydrology, and carbon sequestration (critical for Climate Change mitigation).

Observed Trends (2016–2022)

The maps below display vegetation cover in both 2016 and in 2022. These two maps show a noticeable increase of forested areas, particularly in the northern and western parts of the Peninsula. This increase in denser woody vegetation may be linked to favourable wet season rainfall patterns during this period or reduced disturbance through improved fire and land management practices. Large areas of the Peninsula remain dominated by sparse woody vegetation, which is consistent with the region’s semi-arid climate and sandy soils.

However, in some areas, this may also reflect ongoing disturbance pressures such as, fire intensity, or clearing. Around Broome Road and along parts of the coast, subtle changes in vegetation density are visible. These shifts may be associated with urban development, tourism-related activities, or altered fire regimes.

In the eastern part of the Peninsula, sparse woody vegetation continues to dominate, with little evidence of forest expansion. This likely reflects the influence of local soil types, hydrology, and land use pressures. Several factors may have contributed to these observed changes. Fire regimes, particularly the reintroduction of cultural burning through Indigenous ranger programs, are helping to restore healthy vegetation mosaics. Higher rainfall years associated with La Niña cycles between 2017 and 2021 have also supported woody vegetation growth. At the same time, pressures such as grazing by cattle and feral herbivores, as well as development along transport and coastal corridors, continue to shape the vegetation cover. Increased investment in Indigenous Protected Areas and ranger-led land management appears to be playing a positive role in supporting vegetation recovery.

Regenerating forest cover provides critical habitat for native fauna, while also strengthening the resilience of culturally significant ecosystems. Greater vegetation density enhances carbon storage potential, contributing to regional and national climate action goals.

However, increased woody growth may also elevate fuel loads, highlighting the importance of careful fire management to reduce risks to communities and infrastructure.

Looking ahead, the Shire can continue to support Indigenous ranger groups and cultural fire management to balance ecological health with community safety. Regular monitoring of vegetation cover through remote sensing will help identify emerging trends and pressures. Protecting high-value vegetation from invasive species and clearing, and promoting sustainable approaches to tourism and development, will be essential in maintaining the health of the Dampier Peninsula’s landscapes. Strong collaboration with partners such as DBCA Traditional



Owners will ensure vegetation management contributes to biodiversity conservation, cultural values, and carbon outcomes.

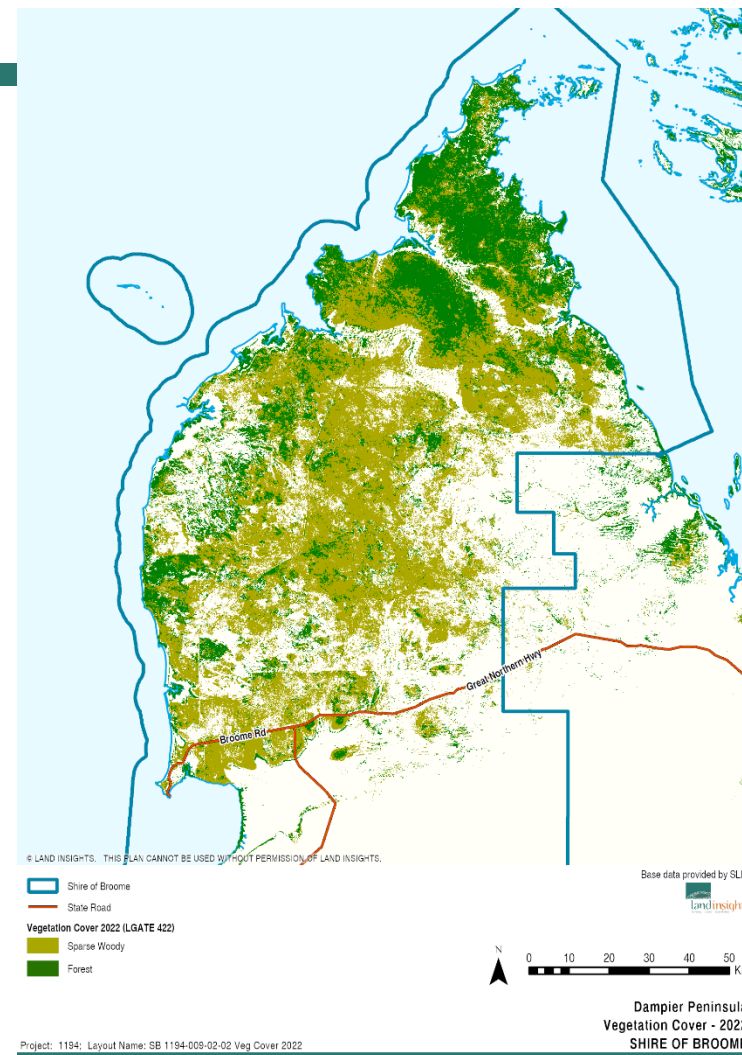


Figure 5.2 - Dampier Peninsula Vegetation Cover 2016 vs 2022

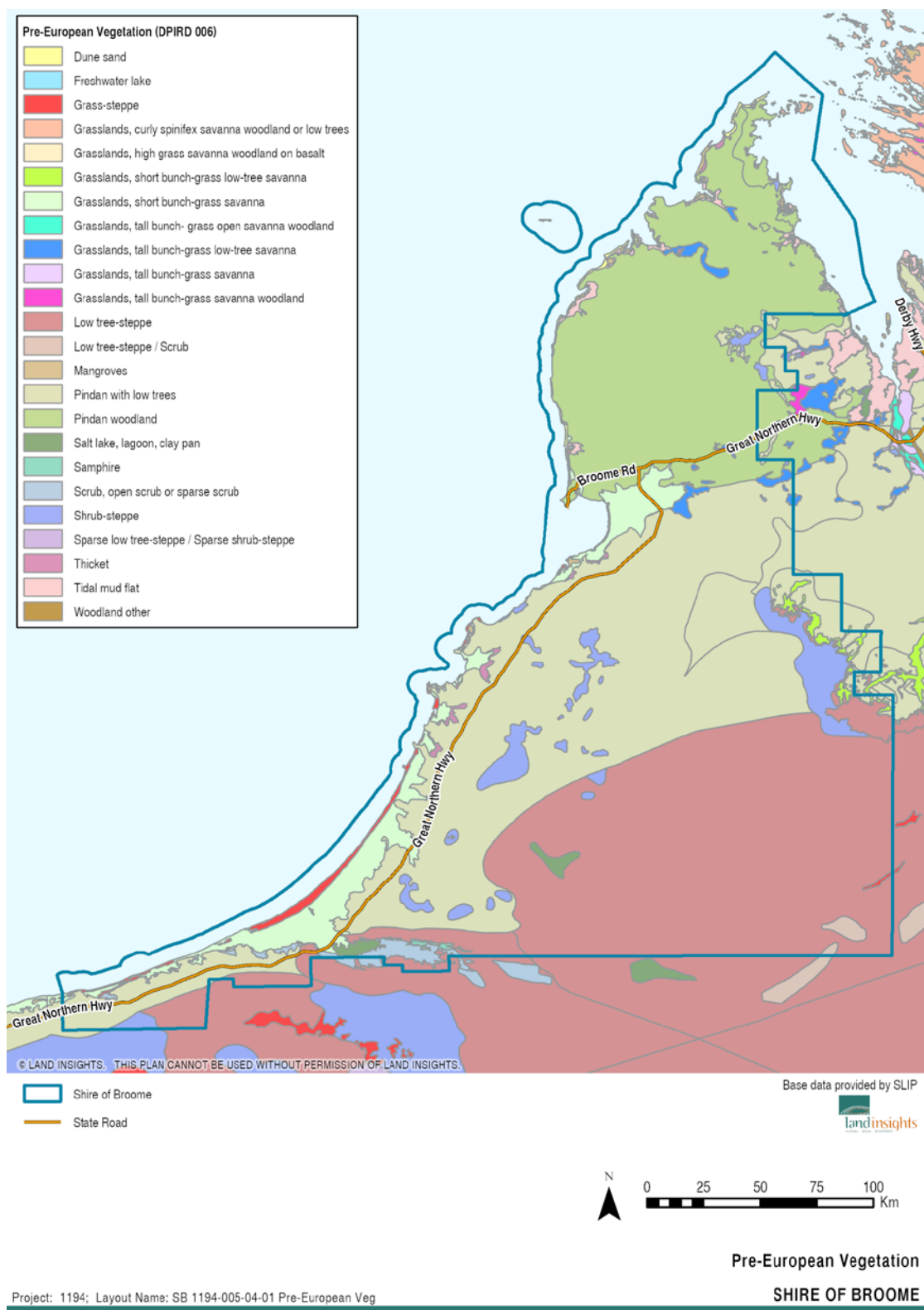



Figure 5.3 - Pre-European Vegetation



The Pre-European Vegetation map depicts the distribution of vegetation communities across the Shire of Broome prior to large-scale European settlement. It highlights the dominance of pindan woodlands, open grasslands, vine thickets, mangroves, tidal flats, and claypans, which together form the ecological foundation of the Kimberley coast. These vegetation types are strongly tied to cultural identity, ecological function, and biodiversity values.


The map also helps to identify areas where native vegetation remains largely intact compared to landscapes that have undergone clearing or modification since colonisation. Recognising the baseline distribution of ecosystems is essential for conservation planning, ecological restoration, and cultural heritage protection.

5.2 2016 Situation

In 2016, Broome's biodiversity was recognised as one of its most important environmental and cultural assets. The Shire lies within the Dampierland bioregion, which includes pindan woodlands, vine thickets, mound springs, claypans, and salt flats. It also features internationally significant intertidal mudflats, particularly at Roebuck Bay and Eighty Mile Beach.

Although habitat condition was assessed as "very good" overall, a range of pressures were already apparent:

- **Threatened Ecological Communities (TECs):** Several TECs have been identified within the Shire, including the Monsoon Vine Thickets on coastal sand dunes, which are listed as Endangered under the Commonwealth EPBC Act, as well as intertidal mudflat communities, both recognised for their vulnerability.
- **Low Reserve Coverage:** A very small proportion of the Shire's land is protected within formal reserves, with only a limited range of vegetation associations currently covered. Many additional unreserved associations are considered high priorities for future conservation action.
- **Species Loss:** The region has experienced significant mammal extinctions. Feral cats have been identified as a major contributor to these declines, exerting unsustainable predation pressure, especially on small native mammals.
- **Fire Regimes:** The 2016 report highlighted a shift towards more frequent late-dry season fires, which tend to be larger, hotter, and more destructive compared to traditional mosaic burning. These fire patterns have contributed to habitat degradation and increased vulnerability to weed invasion.
- **Invasive Species:** A variety of Weeds of National Significance (WONS) are present, particularly along roads and disturbed corridors. Their spread has been linked to land clearing and changes in fire regimes.
- **Hydrological Alteration:** Urban expansion and infrastructure development have disrupted natural surface water flows, especially in claypan and wetland environments. These

- 
- changes have significant implications for species that rely on seasonal inundation and ephemeral wetlands.
 - Coastal Development: In Roebuck Bay and Cable Beach, threats such as coastal erosion, recreational vehicle access, and unmanaged foot traffic have been noted. These pressures impact turtle nesting sites, intertidal invertebrate communities, and saltmarsh zones.
 - Cultural and Data Gaps: The report identified a lack of integrated biodiversity data across the Shire. There is currently no coordinated system for incorporating Traditional Ecological Knowledge into environmental planning or biodiversity assessments, and much of the available information remains project-based, lacking an overarching Shire-wide Biodiversity Management Plan.


The 2016 findings informed recommendations to expand the reserve network, strengthen fire and weed control, improve species monitoring, and support greater involvement of Traditional Owners in conservation planning and management.

5.3 2025 Situation

Community engagement highlighted significant concerns regarding biodiversity conservation within the Shire. A survey conducted for the project received 122 responses, with 87% of participants identifying native wildlife and habitat protection as their highest priority. Marine biodiversity conservation followed at 71%, while 64% emphasised the importance of controlling invasive species. Despite these priorities, confidence in progress since 2016 was overwhelmingly low; only 1% of respondents observed “significant progress,” whereas 50% reported “no change” or even a decline. Key concerns cited included the elimination of the Shire’s Environment Officer role, the dismantling of the Significant Tree Register, ongoing land clearing, impacts of bushfires, and inadequate weed management.

Workshop discussions and interviews reinforced many of these issues. Participants advocated for the development of a comprehensive Biodiversity Management Plan, more robust data tracking species trends, and enhanced measures for fire and invasive species control. Traditional Owner groups emphasised the importance of co-governance, particularly the integration of cultural burning practices. The Yawuru Park Council highlighted the progress made in developing four park plans under joint management since 2016, although these plans have yet to be fully integrated into Shire documentation.

Since 2016, a series of legislative reforms have been enacted with the purpose of strengthening biodiversity conservation efforts. These measures demonstrate a sustained commitment to environmental stewardship and align with broader policy objectives at a State and local level. Notable among these is the *Biodiversity Conservation Act 2016* (WA), which replaced outdated legislation and introduced modern provisions for protecting threatened species. Collaborative initiatives such as the Guniyan Binba Conservation Park Management Plan (2020), the Minyirr



Buru Conservation Park Management Plan (2018), the Yawuru Nagulagun Roebuck Bay Marine Park Revised Management Plan (2023), and the Roebuck Bay Marine Park Joint Management Agreement (2024) provide frameworks for co-management of significant conservation areas. Additionally, the declaration of the Yawuru Indigenous Protected Area (IPA) in 2021 establishes a cultural and biodiversity management framework for contiguous wetlands and intertidal zones.

Efforts to address specific threats have also been strengthened. The Western Australian Feral Cat Strategy 2023–28 allocates significant resources (statewide) towards landscape-scale measures such as baiting, monitoring, and research to mitigate predation. Invasive weeds are identified as a pervasive cause of altering fire behaviour and competing with native vegetation, remains a critical focus for control efforts. Meanwhile, community-led initiatives, including weed mapping and native plant propagation, are aiding broader conservation goals.

Roebuck Bay continues to serve as a vital non-breeding habitat for migratory shorebirds along the East Asian–Australasian Flyway. Despite ongoing pressures, these tidal mudflats support up to 120,000 migratory shorebirds annually across more than 50 species. Enhanced monitoring programs and partnerships between local organisations and Indigenous ranger groups play a vital role in protecting these ecological values.

Future biodiversity efforts should focus on fostering collaborative relationships between stakeholders, improving resource allocation, and integrating cultural perspectives into conservation strategies. Emphasizing adaptive management and regular monitoring will be crucial in responding to ecological challenges effectively. Strengthening community engagement and empowering Traditional Owner groups will create opportunities for more inclusive and holistic approaches to biodiversity protection. Additionally, maintaining transparency in conservation initiatives can help build trust and ensure sustained support from the public.

5.4 Change Assessment Summary

Indicators combine quantitative datasets (reserve extent, weed transects, species-occurrence records) with qualitative consultation feedback. Confidence levels reflect data granularity and consistency over time.

Table 5.1 - Indicators (Biodiversity)

Indicator	2016 Baseline	2025 Snapshot	Trend	Confidence in Trend	Rating	Confidence in Rating
Landscape condition	Natural areas largely intact and undeveloped; condition "very good"	4 % of survey respondents felt land management had improved; > 50 % reported no change or decline	▼	Medium	Very good	High
Understanding of landscape-scale threatening processes	Majority of threats not well-understood; major data gaps noted	Community comments still emphasise inadequate understanding of fire, weeds and other threats	→	Medium	Poor	Medium
eBird checklists (Broome Bird Observatory)	6 150 checklists (2009–2018)	41 672 checklists (2019–2024)	▲	High	Good	High
Regional joint management agreements declared	1 formal JMA and 2 IPA declarations	3 IPA declarations (Yawuru IPA) and 1 additional JMA (Yawuru Nagulagun/Roeback Bay Marine Park).	▲	High	Good	High
Shire as a formal partner in joint management plans	0 endorsed joint management plans in place – while the Yawuru ILUA identified the Shire as a joint manager, management plans had not yet been finalised or endorsed by Council	2 active formal partnerships – Minyirr Buru CMP (2018) & Guniyan Binba CMP (2020); The Shire is not a partner in the Yawuru IPA or the Roeback Bay Marine Park JMA	▲	High	Fair	High

5.5 EMP Actions (2025-2035)

Objective

To safeguard and enhance the Shire's native biodiversity by expanding formal protected areas , embedding adaptive environmental objectives across planning and operations, and empowering community and Traditional Owner stewardship.

Table 5.2 - EMP Actions (Biodiversity)

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resource Requirements	Proposed Partnerships	Linked strategies
2.1 Provide a Biodiversity Management Plan for Shire managed land	2030-2035	High	Provide	In 2025, only 4 % of respondents felt biodiversity had improved, while > 50 % saw no change/decline, and no Shire-wide plan currently exists. Embedding explicit biodiversity objectives in a formal Plan will guide targeted actions, align budgets with strategic outcomes, and address key threats identified in the 2016 SoE and 2025 Engagement Report. Community engagement found that improving biodiversity outcomes is incredibly important. The provision of a Biodiversity Management Plan	Land Tenure Officer; Manager of Operations	\$50k - \$100k	DBCA, Yawuru RNTBC, community environmental groups	Minyirr Buru Management Plan; Guniyan Binba Management Plan; Local Planning Strategy 2023

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resource Requirements	Proposed Partnerships	Linked strategies
				will help identify threatened species on Shire management land and support integrating biodiversity considerations into the future planning and development.				
2.2 Advocate for DPIRD and DBCA to provide reports on progress on invasive species management and report to the community.	Ongoing	Low	Advocate	Buffel grass is now widespread in Kimberley red-soil groups, and feral-cat densities (~0.18 cats/km ²) continue to threaten small fauna. This is predicted to be compounded by the imminent arrival of cane toads to the region. A funded, coordinated strategy—covering baiting, mechanical control and monitoring—will reduce invasive pressure, as recommended by DPIRD and McGregor et al. (2015).	Manager of Environmental Health, Emergency and Rangers	Internal	DBCA, Yawuru RNTBC, Aboriginal Communities and Ranger Groups	
2.3 Assist with regulating illegal clearing activities through reporting and continuing to provide comment on native	Ongoing	Medium	Regulate	The 2016 SoE flagged unauthorised clearing and dune - system disturbances as major pressures. Prioritising compliance inspections, issuing penalty notices and publicly reporting enforcement outcomes will deter non-	Land Tenure Officer Manager of Planning & Building Services	Internal	DWER	Local Planning Scheme No. 7; Local Planning Strategy 2023

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resource Requirements	Proposed Partnerships	Linked strategies
vegetation clearing applications.				compliance, protect remnant habitats, and foster a culture of environmental stewardship.				
2.4 Undertake urban heat mapping to identify areas in need of improved revegetation and canopy re-growth.	2028-2032	Medium	Provide	The 2016 SoE highlighted the need for expanded habitat protection and restoration. Strengthening revegetation in reserves will enhance connectivity for threatened ecological communities and improve urban greening. Undertaking urban heat mapping will help identify areas in need of re-growth.	Manager of Planning and Building	\$60k-\$120k		
2.5 Advocate for the State government to provide improved funding mechanisms to the Yawuru Conservation Estate ranger program to improve environmental monitoring.	Ongoing	High	Advocate / Partner	Through the YPC, resourcing restraints are consistently voiced by DBCA staff as having an impact on their operational capabilities. Funding for this Ranger program, which is an important employment avenue for Yawuru people, is integral to maintaining a high level of management over the park. The lack of resourcing has compromised the operational ability to monitor park biodiversity resulting in a growing gap of	Land Tenure Officer CEO	Internal	DBCA; Yawuru RNTBC	Minyirr Buru Management Plan; Guniyan Binba Management Plan

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resource Requirements	Proposed Partnerships	Linked strategies
				information required to understand biodiversity levels within the park.				
2.6 Facilitate review of stream 1 of the Community Development Fund Guidelines to include environmental and biodiversity as a funding category.	2026-2028	Medium	Facilitate; Fund	Community engagement has found that environmental groups are seeking more support from the Shire. Allocating a portion of the budget specifically for environmental groups and initiatives will demonstrate the Shire's commitment to supporting these groups as well as result in improved environmental benefits and knowledge for the community.	Place Activation Coordinator	Internal		
2.7 Partner with community environmental groups to address key areas of priority environmental concern .	Ongoing	Medium	Partner; Facilitate	There are a lot of people and groups within the community undertaking volunteer environmental initiatives. Establishing a formal partnership with some groups could assist them through resource sharing, knowledge sharing.	Land Tenure Officer; Manager of Operations	Internal	Community Environmental Groups	
2.8 Provide conservation measures to retain and promote flora and	2026-2030	High	Provide	Biodiversity was a high priority through community engagement. Though most conservation land is managed by DBCA, Shire managed	Manager Operations	Internal	Local Environmental Groups;	

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resource Requirements	Proposed Partnerships	Linked strategies
fauna species living on Shire managed reserves and roads, where identified				reserves are also home to a range of native flora and fauna. Identifying key species and then integrating appropriate conservation measures will conserve important native species and ensure people are aware of their presence.			Yawuru RNTBC	
2.9 Facilitate feral cat trapping program.	2027-2028	Medium	Facilitate	Feral cats are a significant threat to native wildlife. The Shire's Animal Management Plan includes actions to manage and capture feral cats and reduce numbers.	Manager of Environmental Health, Emergency and Rangers	\$5k	DBCA; Yawuru RNTBC; Local Veterinary services	Animal Management Plan

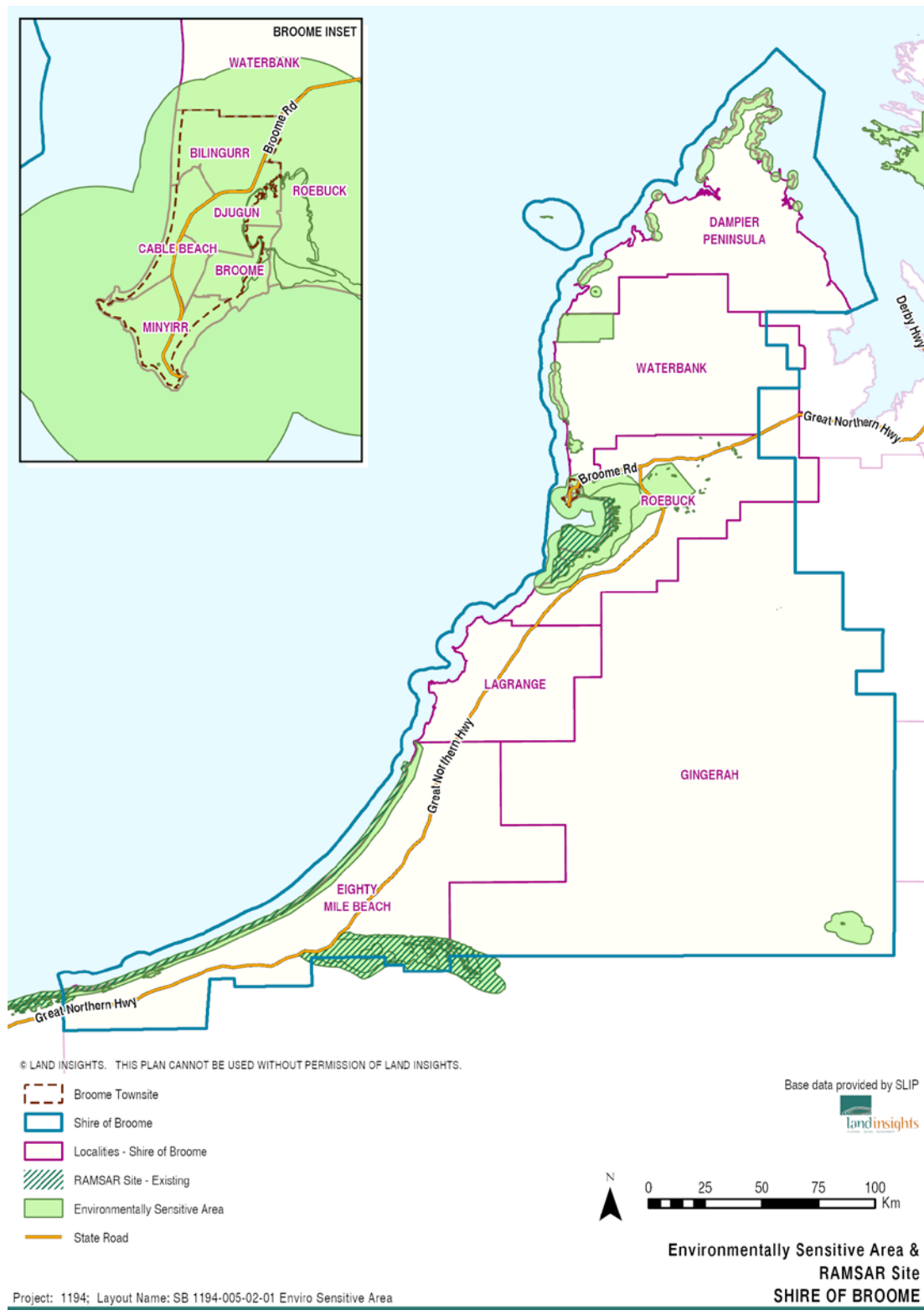


Figure 5.4 - Environmentally Sensitive Area & RAMSAR

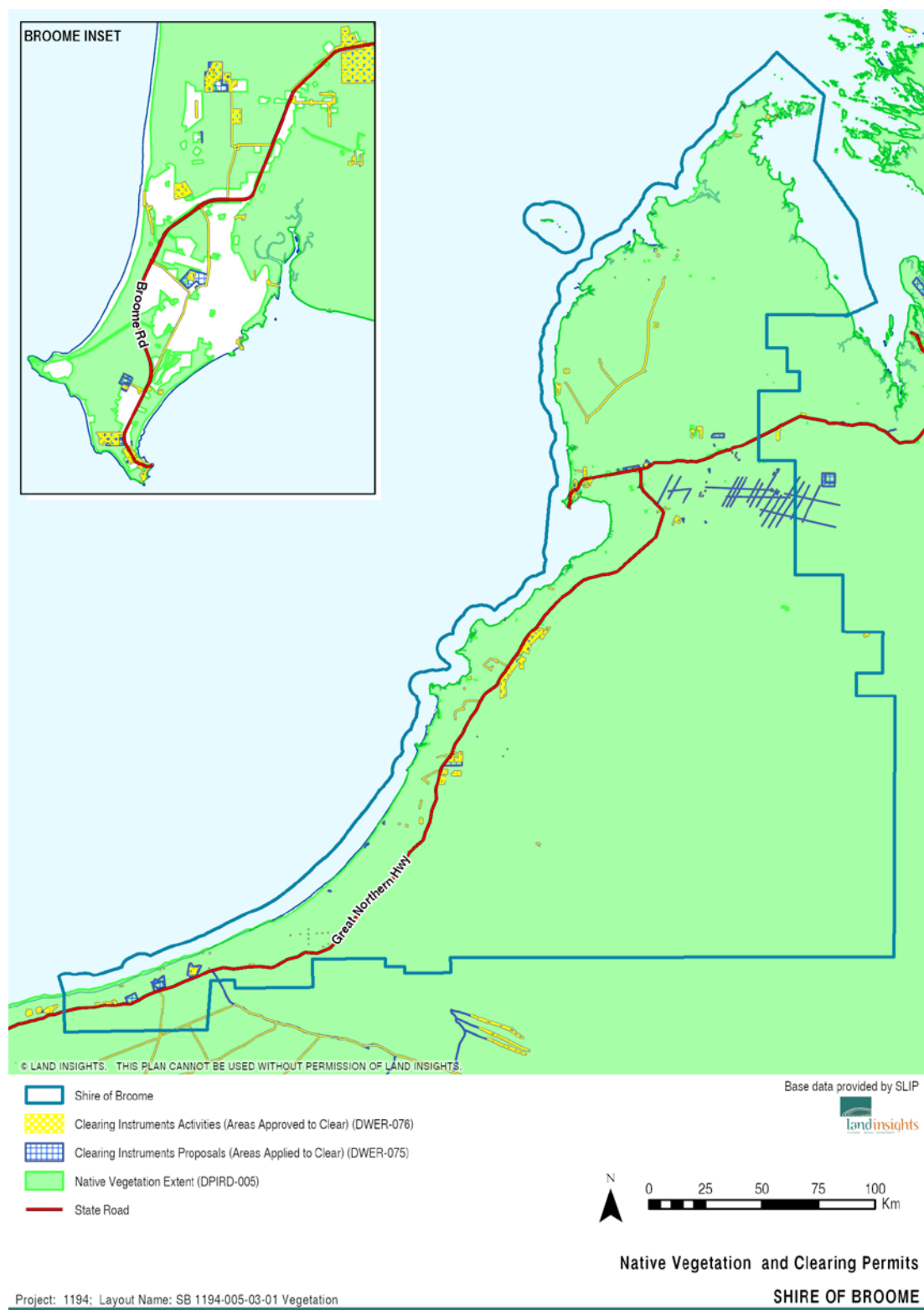


Figure 5.5 – Native Vegetation and Clearing Permits



6 Water Resources

This section analyses baseline conditions, tracks key indicators of change between 2016 and 2025, and outlines a strategic framework for water resource management for 2025–2035. It sets out the Shire’s priorities for securing water supplies, improving stormwater management, and strengthening governance within Broome’s unique wet-dry tropical environment.

Broome’s water resource management has changed significantly since 2016. At that time, reliance on the Broome Sandstone aquifer remained essential, and per-capita potable water use exceeded regional targets, despite a 16% reduction since 2009–10. Leak detection was limited to periodic reconciliations, and stormwater infrastructure consisted of outdated systems that contributed pollutants directly to Roebuck Bay. The Broome South Wastewater Treatment Plant was also identified as requiring remediation due to nutrient plumes affecting adjacent areas.

By 2025, infrastructure upgrades, policy changes, and community engagement have helped address many of these challenges. Implementation of a fit-for-purpose water supply through the closure of the Broome South Waste Water Treatment Ponds, reduces reliance on scheme water for public spaces by approximately 543 ML each year. Water-efficiency initiatives, such as rebates, localised repairs, and education programs, have further supported sustainable water use.

Policy reforms, including the Shire’s Structure Plan and Subdivision Policy has reinforced best-practice stormwater management techniques such as swales and bioretention systems. Community involvement in maintenance and informal monitoring has complemented these efforts, highlighting the importance of local stewardship in water management. Feedback from the 2025 Engagement Outcomes report identified the need for improved drainage maintenance, transparent monitoring of aquifer health, and greater involvement of Traditional Owners in water resource decisions.

Looking ahead, the strategic framework for 2025–2035 endeavours to improve management of all urban runoff before it is discharged into the environment. It also calls for real-time transparency over industrial and borefield water extraction, broader groundwater monitoring, and the phasing out of environmentally harmful practices such as hydraulic fracturing. These priorities are underpinned by long-term goals to expand water education programs, improve compliance, and strengthen cultural connections to land and water through active engagement with Traditional Owners.

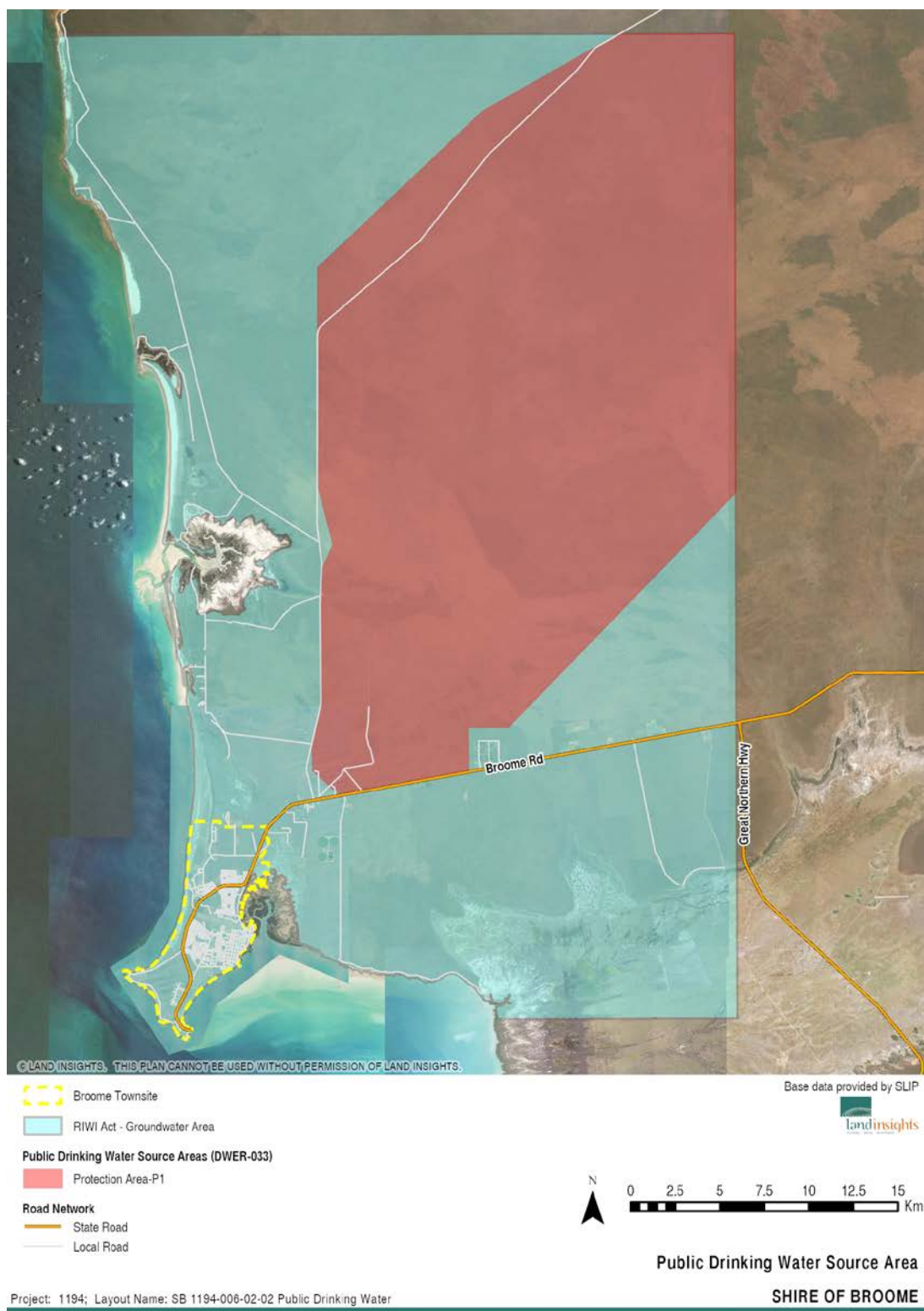



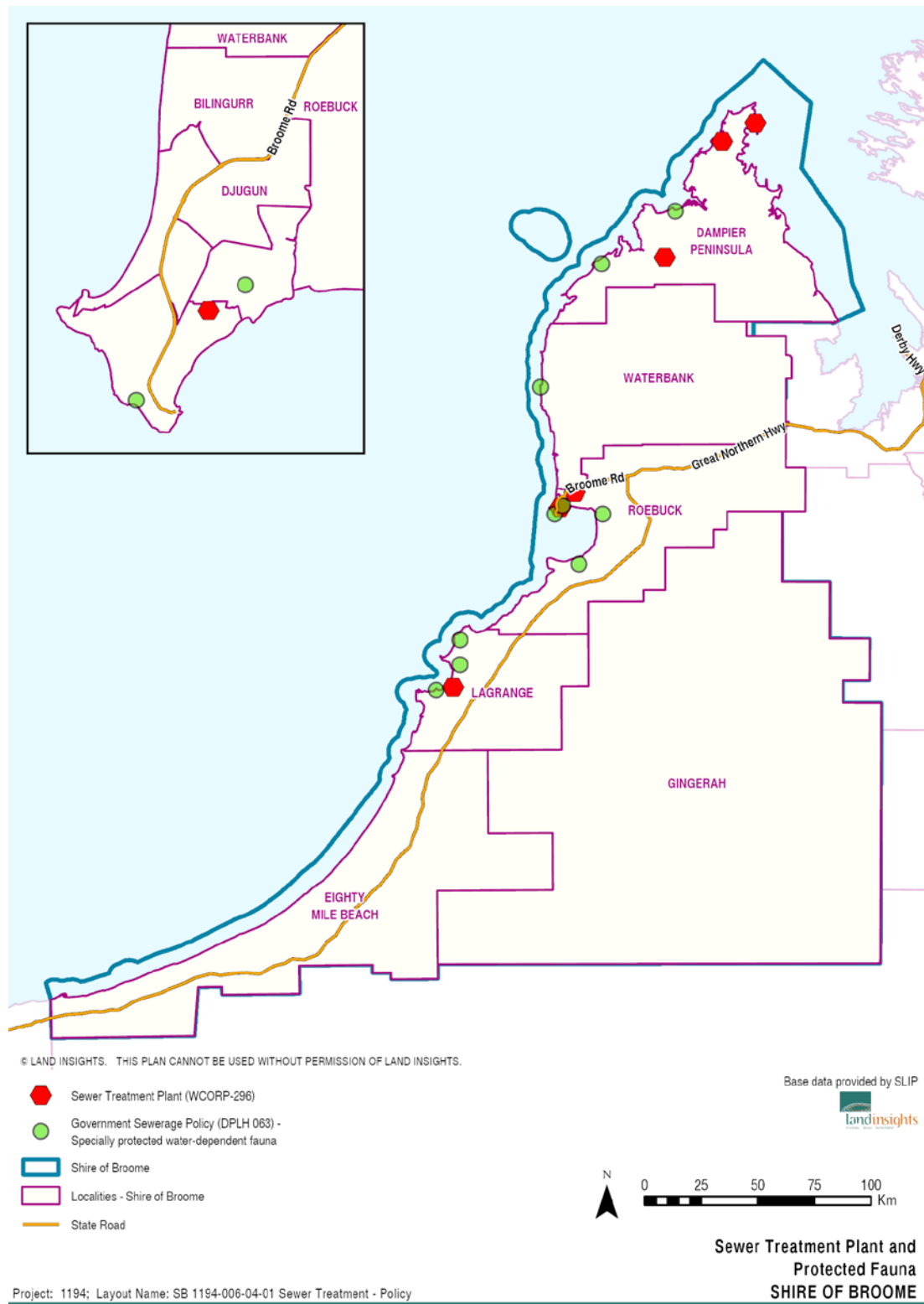
Figure 6.1 - Public Drinking Water Source Area



The Public Drinking Water Source Area (PDWSA) map shows the designated protection zones that safeguard Broome's groundwater resources, which are the town's principal source of drinking water. The PDWSA, defined under the *Rights in Water and Irrigation Act 1914*, establishes Protection Area categories such as Priority 1 (P1), which apply stringent land-use controls to minimise contamination risks. The map illustrates how these zones overlap with urban and peri-urban areas, highlighting the close relationship between water security and planning decisions in Broome.

Groundwater in this region is highly vulnerable to contamination from industrial, agricultural, and urban activities due to its shallow nature and the permeability of the soils and geological formations. Safeguarding the PDWSA therefore requires careful integration of land-use planning, infrastructure approvals, and monitoring by both State and local government.

The Shire's role lies in ensuring planning decisions remain consistent with Department of Water and Environmental Regulation (DWER) guidelines, while also raising awareness among developers and the community about the importance of protecting water quality. With Broome's growing population and increasing pressure on natural resources, maintaining the security of the PDWSA is essential to the resilience of the town. Ensuring that water supplies remain clean, reliable, and sustainable aligns directly with the SoE's broader objectives of safeguarding ecosystem health and community wellbeing.





6.1 2016 Situation

In 2016, Broome's water resources were under increasing strain due to high per-capita consumption, limited real-time leak detection, and uncertainty about the long-term sustainability of the aquifer. Although water demand had fallen from a 2009–10 peak of 6.2 gigalitres (GL) per year to about 5.2 GL per year by 2012–13, it remained above the Water Corporation's regional efficiency target of 155 kilolitres (kL) per person per year. Leak detection relied mainly on quarterly reconciliations between production volumes and customer billing, with no continuous telemetry or district metering to detect bursts or hidden leaks in the network.

Broome's drinking water supply comes entirely from the Broome Sandstone aquifer, located around 12 kilometres northeast of the town centre. Monitoring data indicated that water levels were generally stable, but the 2012 Public Drinking Water Source Protection Plan raised concerns about the potential for seawater intrusion into coastal bores during extended periods of high extraction or dry climate conditions. No alternative water sources such as desalination, wastewater recycling, or surface-water transfers were considered operationally or economically feasible, making the sustainability of the aquifer a key risk.

Most of Broome's drainage network consisted of shallow, unlined swales and open channels. Many of these lacked sediment and pollutant controls such as gross pollutant traps or biofiltration systems. Although Water Sensitive Urban Design (WSUD) principles are incorporated into new land releases, in existing areas, challenges exist to retrofit these design principles into existing infrastructure. As a result, sediment and nutrient runoff continued to flow into Roebuck Bay, a Ramsar-listed wetland of international significance.

Wastewater contamination was also an increasing concern. In 2015, the Department of Environment Regulation reclassified the Broome South Wastewater Treatment Plant as "Contaminated – Remediation Required" following investigations that found elevated nitrogen and phosphorus levels in groundwater beneath the site. The adjacent golf course was also identified as "Contaminated – Remediation Required," heightening community concerns about nutrient seepage contributing to algal blooms and seagrass decline in Roebuck Bay.

Water-efficiency programs were in the early stages of development. Scheme water was still widely used to irrigate sports ovals, controlled by basic time-clock systems. Uptake of residential retrofits such as water-saving devices was limited. Community education efforts were modest, focusing on Waterwise Council signage and local events. Nutrient-load estimates were based on broad modelling assumptions, and confidence in water-quality data remained moderate due to a lack of consistent, site-specific monitoring.



6.2 2025 Situation

Engagement outcomes

Some areas of Broome's drainage infrastructure were identified as a concern in the 2025 Engagement Outcomes Report. The primary concerns raised included; weed management, level of service of maintenance practices and the transportation of sediment and contaminants. Some historic open swales with steep batters have limited detention controls and can be susceptible to scouring and the transportation of sediment or other contaminants into Roebuck Bay and other coastal areas. There are some historic informal agreements and infrastructure arrangements that, over time, have led to confusion about whether maintenance responsibilities fall under the remit of the Shire, DBCA, NBY, YPC or Main Roads WA.


There are some ongoing issues with inconsistent weed control and at times there can be backlog of maintenance activities due to seasonal conditions and resourcing constraints. In some locations volunteer groups have taken an initiative to conduct weed removal, clearing illegal dumping, and undertaking informal water-quality monitoring using personal resources. In summary, there is an opportunity to improve the drainage infrastructure in some locations which may address potential risks to the ecological integrity of Roebuck Bay, a Ramsar-listed wetland and to improve public safety and fire hazards.

Community feedback has outlined a clear vision for the future of water management in Broome. Participants strongly supported capturing, treating, and reusing urban runoff before it is released into the environment. There was also a consistent call for greater transparency around industrial and borefield water extraction, along with broader monitoring of groundwater and water storage tanks. Feedback highlighted the importance of involving Traditional Owners in assessing aquifer health. Over the longer term, the community expressed support for phasing out environmentally harmful practices, such as hydraulic fracturing, by 2035.

It is important to note that the Department of Water and Environmental Regulation (DWER) already makes a range of water information publicly available, including the Water Register and the Water Information Reporting Tool.

However, these tools do not currently provide real-time reporting, and community consultation suggests that awareness of these resources remains low. As a result, many residents perceive a gap in accessible and transparent information. Embedding ongoing water education initiatives and incentive programs, which will therefore be critical to ensuring that Broome's unique environment is safeguarded into the future.

Key considerations



Since 2016, Broome’s water management framework has been significantly strengthened through targeted infrastructure investments, updated governance arrangements, and community-driven priorities. The decommissioning of the Broome South Wastewater Treatment Plant marked a major milestone, following a \$65.6 million expansion of the Broome North Water Resource Recovery Facility (WRRF). This transition enabled all wastewater flows to be treated at the North WRRF, allowing the South site to be returned to the State for future use. The closure of the South plant facilitated a subsidised supply of non-potable bore water, which is now used for irrigating Haynes Oval, the Broome golf course, BRAC sports fields, and St Mary’s College grounds. This initiative has saved ratepayers over \$1.2 million annually in potable water costs.

Despite recent improvements, stormwater management within the Broome townsite remains a significant challenge. Much of the network is made up of steep, unlined channels that increase flow rates, cause erosion, and carry sediment and weeds into Roebuck Bay. Maintenance responsibilities are not always clear to residents, leading to inconsistent weed control and a reliance on volunteer clean-up efforts.

Community engagement during the project has highlighted the need for upgraded stormwater infrastructure, including systems that can capture, treat, and reuse urban runoff before it enters the environment. Respondents also expressed a desire for more transparency in water-use reporting and greater involvement of Traditional Owners in aquifer monitoring and water management decisions.

Policy updates have provided essential statutory underpinnings to these ambitions. Local Planning Policy 5.22 requires new subdivisions to manage stormwater through infiltration swales and sediment-control measures rather than direct discharge. Policy 5.22 mandates the incorporation of water-sensitive urban design (WSUD) principles, such as landscaped bioretention systems, in commercial developments. Additionally, the Shire’s Asset Management Policy acknowledges stormwater¹ infrastructure—including drains, pits, and pipes—as valuable assets, ensuring their lifecycle planning and regular auditing.

6.3 Water – Change Assessment Summary

Table 6.1 - Indicators (Water Resources)

Indicator	2016 Baseline	2025 Snapshot	Trend	Confidence in Trend	Rating	Confidence in Rating
Stormwater infrastructure mapping	No town-wide mapping	Town wide mapping available online through Intramaps portal.	→	Medium	Fair	High
Drainage channel condition	Predominantly unlined 'V-shaped' open channels in older areas; limited treatment (no GPTs).	Predominantly unlined "V-shaped" open channels	→	High	Fair	High
Stormwater policy coverage	WSUD requirement referenced in SoE 2016 for subdivisions	LPP 5.22 (Structure Plan & Subdivision Standards) in force; Asset Management Policy guides stormwater assets.	▲	High	Good	High
Wastewater recycling	Wastewater reuse scheme; Broome South WWTP operating; classified 'Contaminated – Remediation Required' (DER 2015).	Broome South WWTP decommissioned after \$65.6 million upgrade investment; all wastewater diverted via 12 km pipeline to Broome North WRRF.	▲	High	Good	High
Water-efficiency initiatives (status)	Limited programs; irrigation on timers; early retrofits had low uptake.	Broome participates in the Waterwise Council Program; irrigation upgrades, leak detection and public education	▲	Medium	Good	Medium

Indicator	2016 Baseline	2025 Snapshot	Trend	Confidence in Trend	Rating	Confidence in Rating
		underway. No verified 2025 quantitative data published.				
Regional wastewater recycling benchmark (North West WA)	Approx. 42% of treated wastewater recycled across North West WA (context from Water Corporation regional summary).	No updated regional benchmark for 2025 published; latest corporate strategy targets 35% recycling by 2030 (statewide).	▲	High	Good	High

6.4 EMP Actions (2025-2035)

Objective

To strengthen Broome's water resource management by integrating targeted infrastructure upgrades, robust policy frameworks and community-driven initiatives, thereby securing supply, improving water quality and enhancing resilience through to 2035.

Table 6.2 - EMP Actions (Water Resources)

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resource Requirements	Proposed Partnerships	Linked strategies
3.1 Partner with other stakeholders to formalise inter-agency and volunteer maintenance agreements for	2026-2028	High	Partner	Engagement Outcomes found unclear maintenance roles between the Shire and Main Roads WA, resulting in patchy weed control and volunteer fatigue. A Service-Level	Manager of Operations	Internal	DBCA; Main Roads WA; Yawuru RNTBC;	Asset Management Plan

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resource Requirements	Proposed Partnerships	Linked strategies
drainage infrastructure.				Agreement will define responsibilities, reduce duplication and ensure regular clearing of sediment and invasive grasses.			Community volunteers	
3.2 Fund ongoing identification and repairing of unaccounted water loss of Shire assets.	Ongoing	Low	Fund	Unaccounted losses increase demand on the Broome Water Reserve aquifer and incur costs. Systematic audits and targeted repairs will improve supply security and resource efficiency.	Manager of Engineering Manager of Operations	Internal		Asset Management Plan
3.3 Fund audit of water usage in Shire owned buildings and integrate water saving fixtures where required.	2030-2032	Low	Provide	A tangible action to demonstrate leadership in smart water use and management and improve cost savings and reduce wastage.	Manager of Engineering	\$10k-\$35k	Water Corporation	Asset Management Plan
3.4 Provide District Stormwater Drainage Management Strategy and allocate funding through budget process to implement	2026-2027	High	Provide / Partner	Unlined channels scour banks and export sediment and nutrients to Roebuck Bay. Under LPP 5.22, retrofits will slow flows, improve water quality and reduce long-term maintenance costs.	Manager Engineering Manager Operations	\$150k-\$250k	Main Roads WA; DBCA; Yawuru RNTBC	CHRMAP; Minyirr Buru Management Plan; Local Planning Strategy 2023

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resource Requirements	Proposed Partnerships	Linked strategies
key recommendations.				Stormwater management transects various land tenures. For example, the flow on impacts of stormwater impact the Yawuru Conservation Parks surrounding the Broome townsite as well as impacting sediment outflows into Roebuck Bay. Furthermore, drainage along Gubinge Road is managed by Main Roads and interacts with both the conservation estate and Shire managed stormwater drainage channels. A comprehensive stormwater management plan will mitigate future impacts of stormwater flow into adjoining tenures.				
3.5 Provide water sensitive urban design opportunities for bioretention raingardens or other	2027-2035	Medium	Provide	The draft Old Broome-Chinatown Precinct Structure Plan recommends	Manager Engineering Manager of Planning and Building	\$8.5m funding allocated (refer to Council Plan)		Old Broome-Chinatown and Cable Beach

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resource Requirements	Proposed Partnerships	Linked strategies
urban stormwater treatments to be included in Hamersley Street and Conti Foreshore Enhancement Plan and Sanctuary Road Streetscape Plan.				enhancements to the Hamersley Street streetscape and the Conti Foreshore, including the development of a linear foreshore park. Water sensitive urban design principles can be included to ensure water savings and sustainable management of stormwater runoff. Likewise, upgrades to Sanctuary Road streetscape have been forecasted in the Cable Beach Precinct Structure Plan.				Precinct Structure Plans; CHRMAP; Concil Plan 2025-2035; Local Planning Strategy 2023
3.6 Partner with DevWA, KPA, Yawuru RNTBC, Water Corporation and DBCA to undertake water quality monitoring and	2028-2030	Medium	Partner	Collaborative efforts of water quality monitoring at key sites will improve understanding for all stakeholders. Water monitoring of priority sites is	Manager of Environmental Health, Emergency and Rangers	Internal	DBCA, Yawuru RNTBC, DevWA, KPA; Water Corporation; community	Local Planning Strategy 2023

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resource Requirements	Proposed Partnerships	Linked strategies
ground water monitoring at priority sites.				also recognised as a target within the Minyirr Buru Management Plans.			environmental groups;	



Figure 6.2 Drainage Water Lines



7 Coastal Environments

Coastal environments are among the Shire of Broome's most valued natural and cultural assets. They provide important habitat, recreational opportunities, and economic benefits for the community.


In 2016, management of Broome's shoreline was at an early stage. The Shire relied on a single Coastal Vulnerability Study and had not yet adopted a Coastal Hazard Risk Management and Adaptation Plan (CHRMAP). Informal setback guidelines, scattered foreshore structures, and a lack of systematic monitoring meant dune erosion, stormwater impacts, and unmanaged visitor access continued with limited oversight. Governance arrangements were split between several agencies, cultural heritage features were vulnerable to disturbance, and data gaps limited evidence-based decision-making.

Since adopting the CHRMAP in September 2017, the Shire has integrated controls into its Local Planning Scheme. Clear adaptation pathways now guide approvals and reduce exposure to coastal hazards. An integrated coastal monitoring program, using UAV-LiDAR, annual beach-profile transects, and photo monitoring, has closed key data gaps and improved understanding of sediment movement across major beaches.

Vehicle access and visitor pressures at Cable Beach have been progressively managed over time. Initial restrictions were introduced by Council in 2010 to protect turtle nesting areas north of the rocks during breeding season. These restrictions have been updated as new ecological data has become available. The most recent change, adopted in August 2024, extended the closure period to include all of February each year, based on results from DBCA's long-running turtle monitoring program. These measures, supported by ranger patrols and gate management, have significantly reduced dune trampling and nesting disturbance, although some non-compliance still occurs during peak visitation.

Coastal governance remains complex, with responsibilities shared between local, state, and federal agencies. Marine-related pressures, particularly the increase in cruise ship visits (from 15 vessels in 2019 to 37 in 2024), have required closer coordination between the Shire, the Kimberley Ports Authority, and state agencies. While water-quality data is now published, formal data-sharing agreements are still being developed. The most significant development proposals currently relate to port infrastructure, including the Broome Boating Facility and the Kimberley Marine Support Base (under development), rather than industrial projects within Roebuck Bay.

Major infrastructure projects, such as the Cable Beach Foreshore Redevelopment and Town Beach Redevelopment have included coastal protection measures. Access improvements in the Conservation Estate have also assisted with access management and reducing erosion risk in these sensitive coastal environments. The sandstone cliff collapse at Entrance Point Beach in



January 2025 highlighted the need for ongoing stability assessments and proactive risk management to ensure safe and sustainable use of Broome's coastal areas.

The Shire's coastal management has shifted from informal actions and fragmented oversight in 2016 to an integrated, data-driven framework in 2025. This chapter outlines the evolution of statutory controls, monitoring programs, access management, heritage protection, and resilience planning that together shape Broome's approach to managing its dynamic coastline in the face of climate change and increasing human activity.

7.1 2016 Situation

In mid-2016, Broome's coastal hazard management relied on a single Coastal Vulnerability Study that identified erosion hotspots from Cable Beach northwards through Reddell and Simpsons Beaches. The study recommended dune buffer setbacks, staged retreat in vulnerable areas, and tighter development controls, but these measures were not yet mandatory.

Although the Shire's Local Planning Scheme No. 6, adopted in 2015, included some provisions for coastal protection, a comprehensive statutory framework was still being developed. The Shire's first Coastal Hazard Risk Management and Adaptation Plan (CHRMAP) was in preparation and would not be adopted until September 2017. As a result, many of the study's recommendations were not yet implemented during this period.

Foreshore Infrastructure and Design Gaps


Much of the Shire-owned coastal infrastructure was built during earlier tourism expansions and did not account for Broome's high tidal range, cyclonic storm surges, or shifting sediment dynamics. Stormwater drainage outlets discharged directly onto the beach, bypassing natural infiltration zones and contributing to periodic die-off of salt-tolerant dune vegetation. Concrete vehicle ramps at the base of dunes were installed without scour protection and were beginning to show localised erosion. Timber access structures, while heavily used, were not designed to withstand repeated surge events. As a result, they required ongoing ad hoc repairs rather than planned, resilient upgrades.

Absence of Systematic Monitoring

At that time, there were no regular beach-profile surveys, sediment-budget analyses, or LiDAR mapping for Broome's foreshore. Monitoring relied on occasional aerial imagery, basic visitor counts at car park entry points, and informal observations by community volunteers. Without fixed transect measurements or consistent data collection, the Shire lacked the evidence needed to prioritise dune restoration or predict long-term shoreline change.

Visitor and Vehicle Pressures

Since the 1990s, Cable Beach has been a popular location for recreational four-wheel driving, especially during peak tourist seasons. Concerns about turtle nesting impacts led to the first



formal vehicle access restrictions, introduced at the Ordinary Council Meeting of 30 September 2010 (Item 9.4.2). These measures focused on limiting access north of the rocks during the turtle breeding season.

By 2016, seasonal restrictions were in place, but peak-season days still saw high numbers of vehicles on the beach. Unsealed tracks and limited enforcement capacity meant informal track braiding persisted in some dune areas. This caused disturbance to nesting habitats, nest destruction, and hatchling disorientation. At this stage, vehicle track consolidation and formal access lanes had not been fully implemented, and enforcement remained largely reactive.

Governance and Land Tenure Fragmentation

Responsibility for the foreshore was divided between multiple landholders and agencies, creating a complex governance environment. Within the townsite, tenure was shared by the Shire of Broome, Yawuru RNTBC, the Department of Biodiversity, Conservation and Attractions (DBCA), and the Kimberley Ports Authority, each with different roles in land management, approvals, and maintenance. Outside the townsite, management responsibilities primarily rested with the DPLH, DBCA, and Traditional Owners.

By mid-2016, this overlapping system of responsibilities had led to fragmented coastal management. In practice, this meant reliance on temporary measures such as fencing, spot dune repairs, and ad hoc signage, rather than a coordinated, long-term management approach.

7.2 2025 Situation

CHRMAP Adoption and Review

Since the adoption of the Coastal Hazard Risk Management and Adaptation Plan (CHRMAP) in September 2017, significant progress has been made in embedding statutory controls into local planning frameworks, including a range of adaptation options. These controls aim to improve the resilience of Broome's coastal areas against climate-induced hazards.

In early 2025, the Shire initiated a comprehensive review of the 2017 CHRMAP. This review focuses on updating hazard mapping, vulnerability assessments, and re-evaluating community values. By doing so, the plan seeks to address emerging climate risks and maintain its relevance and effectiveness in guiding sustainable coastal management.

Coastal Monitoring Program

The Shire of Broome has implemented an integrated coastal monitoring program as part of its CHRMAP actions. This program has helped address key data gaps through the use of techniques such as UAV-LiDAR surveys carried out in 2018, 2021, and 2024. Annual beach-profile surveys and community photo-point monitoring have also improved understanding of coastal dynamics and sediment movement.



Visitor and Vehicle Access Controls

Over the last few years, the Shire has implemented stronger measures to manage visitor access on its coastal assets. For example, in 2024, Council resolved to endorse the closure of the beach for vehicles north of the foreshore area, during the month of February, based on data collected through DBCA's volunteer turtle monitoring program. DBCA have improved access controls and reduced unauthorised vehicle access through the Conservation Estate.

These measures have led to a reduction in illegal 4WD use, although occasional breaches continue during peak visitation periods. Ongoing monitoring and enforcement remain crucial to ensure the long-term sustainability of these access controls and to mitigate their environmental impacts.

Cultural Heritage Protection

Within the Broome townsite, progress in cultural heritage protection has been supported through collaboration with Yawuru custodians. Two of the four Yawuru Park Management Plans have been formally endorsed by the Shire, providing guidance for the conservation and management of the cultural, ecological, social, and economic values of the Yawuru Conservation Estate. While these plans influence the Shire's activities, they operate alongside other land management frameworks and have not been fully incorporated into a single, Shire-wide planning document.

Marine and Port Related Pressures

Broome has seen a significant increase in cruise ship visits, rising from 15 in 2019 to 37 in 2024. This increase has raised concerns about greywater discharge and waste management in harbour-front areas. The Kimberley Ports Authority has responded by publishing monthly water quality data, working in collaboration with the Department of Biodiversity, Conservation and Attractions (DBCA) and Yawuru representatives.

Despite these efforts, there are still no formal protocols for data sharing or coordinated responses as part of the Shire's environmental reporting processes.

Industrial Development and Coastal Planning

Local communities and advocacy groups have raised concerns about proposed oil and gas infrastructure projects in the region, such as the Browse LNG project at James Price Point. Community groups continue to advocate for renewable energy and eco-tourism initiatives, arguing that moving away from fossil fuel projects supports regional decarbonisation and long-term sustainability.

As these discussions continue, the Shire faces growing pressure to include climate-conscious planning principles in its coastal strategies, balancing economic development with environmental protection and community values.



Major Foreshore Redevelopment

Stage 2 of the Walmanyjun Cable Beach Foreshore Redevelopment began in April 2025 with funding of about \$35.3 million through a federal–state program. The works include formalising dune setbacks, upgrading pedestrian and vehicle pathways, and improving public facilities. These measures aim to strengthen coastal resilience and manage increasing visitor activity.

The redevelopment is considered a model for integrating resilience planning into major infrastructure projects. It highlights the importance of aligning redevelopment with environmental sustainability and the needs of the community.

Emerging Geotechnical and Access Issues

In January 2025 a sandstone cliff collapsed at Entrance Point Beach, prompting safety measures and agency review. CHRMAP (2017) identifies Entrance Point as a location where geotechnical assessment would improve understanding of coastal stability.

State-Funded Resilience Investment

In April 2024, the Western Australian Government allocated \$750,000 through its Kimberley Resilience Programme for climate adaptation planning. The funding focuses on remote airstrips and port infrastructure and provides a model for co-funding similar initiatives in Broome.

This investment shows growing recognition of the need for resilience planning to meet climate-related challenges and offers support for adapting critical infrastructure in vulnerable areas.

7.3 Change Assessment Summary

Indicator ratings reflect current condition relative to 2016 baseline; trend arrows show movement; confidence grades evidence strength.

Table 7.1 - Indicators (Coastal Environments)

Indicator	2016 Baseline	2025 Snapshot	Trend	Confidence in Trend	Rating	Confidence in Rating
1. CHRMAP Adoption & Review	No formal CHRMAP; management relied on an advisory Coastal Vulnerability Study and the 1999 Town Planning Scheme.	CHRMAP adopted 7 September 2017 and embedded in Local Planning Scheme; review commenced early 2025 under a Coastal Management Program grant to update hazard maps and community values.	▲	High	Good	High
2. Coastal Monitoring Programme	Limited systematic monitoring: only sporadic aerial imagery and informal volunteer observations; no fixed transects, sediment budgets or LiDAR.	Integrated regime—including UAV-LiDAR surveys (2018, 2021, 2024), annual beach-profile transects at Cable Beach and community photo-points—that has closed key data gaps, though secondary-beach coverage remains to be extended.	▲▲	High	Very Good	High
3. Visitor & Vehicle Access Controls	Unrestricted 4WD on Cable Beach; informal tracks; reactive, post-hoc	In 2024, Council resolved to extend the closure of Cable Beach to vehicles, based on annual data collected from DBCA's volunteer turtle	▲	High	Good	High

Indicator	2016 Baseline	2025 Snapshot	Trend	Confidence in Trend	Rating	Confidence in Rating
	enforcement; no formal access lanes until after 2016.	monitoring program. Beach is monitored in coordination between Shire and DBCA/Yawuru rangers with occasional wet-season breaches still occurring. Access control improvements implemented by DBCA to restrict unauthorised vehicle access to the beach.				
4. Cultural-Heritage Protection	Only advisory signage and occasional fencing in consultation with Yawuru custodians; no formal access-control framework.	Four Yawuru Park Management Plans developed. Two have been formally endorsed by the Shire of Broome where they directly fall under the Shire's tenure. Interpretive signage and some formal access routes installed.	▲	High	Good	Medium-High
5. Marine & Cruise-Ship Pressures	Lower cruise activity with no structured water-quality reporting tied to port activities.	Cruise visits rose from 15 (2019) to 37 (2024); Kimberley Ports Authority now publishes monthly water-quality data alongside DBCA and Yawuru, but the Shire's EMP still lacks formal data-sharing and response protocols.	▲	Medium	Fair	Medium
6. Port Interface & Wharf Development	Fragmented governance; only temporary fixes (spot repairs, ad-hoc signage) for port-side access.	Kimberley Ports Authority has permanently closed certain pedestrian wharf crossings; an EPA-reviewed proposal for wharf laydown and offices is underway, but fully integrated coastal-port planning remains to be finalised.	▲	Medium	Fair	Medium
7. Geotechnical Hazards	No proactive geotechnical monitoring; storm-event	Sandstone cliffs at Entrance Point Beach led to immediate safety closures and commissioning	▼	Medium	Poor	Medium

Indicator	2016 Baseline	2025 Snapshot	Trend	Confidence in Trend	Rating	Confidence in Rating
	responses were purely reactive.	of a detailed geotechnical stability assessment.				

7.4 EMP Actions (2025-2035)

Objective

To implement coordinated, practical, and measurable actions that protect and enhance the Shire of Broome's environmental values over the next decade, guided by the principles of sustainability, cultural respect, climate resilience, and community collaboration.

Table 7.2 - EMP Actions (Coastal Environments)

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resourcing Requirements	Proposed Partnerships	Linked strategies
4.1 Provide a review and update the CHRMAP for 2025,	2026-2030	High	Provide	Updating the CHRMAP ensures the Shire adapts to emerging climate risks effectively,	Planning Coordinator	\$180k allocated	KPA, Yawuru RNTBC, DBCA	CHRMAP; Council Plan 2025-2035

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resourcing Requirements	Proposed Partnerships	Linked strategies
adopt its recommendations, and integrate them into LPS 7.				safeguards community values, and maintains statutory setback controls critical for long-term planning.		(refer to Council Plan)		
4.2 Provide a strategic framework for improved management of beach use.	2027-2030	High	Provide; Regulate	Cable Beach is an extremely popular beach that people value in differing ways, sometimes in conflict with one another. Establishing a coordinated beach use framework will mitigate the impacts that conflicting uses have on one another.	Manager of Environmental Health, Emergency and Rangers Manager Planning and Building Land Tenure Officer	Internal	KPA, Yawuru RNTBC, DBCA	CHRMAP; Minyirr Buru Management Plan; Guniyan Binba Management Plan
4.3 Partner with DBCA and Yawuru to achieve targets as set out within Minyirr Buru Management Plan and Guniyan Binba Management Plan.	Ongoing	High	Partner	Collaborating with Yawuru custodians establishes clear responsibilities, safeguards cultural heritage sites, and aligns infrastructure management with community values.	Land Tenure Officer	Internal	Yawuru RNTBC, DBCA	CHRMAP
4.4 Advocate for Expanded Resilience Funding: Lobby State	Ongoing	Low	Advocate	Securing co-funding supports large-scale adaptation works, such as dune nourishment and stormwater retrofits, enhancing	CEO Shire President	Internal		

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resourcing Requirements	Proposed Partnerships	Linked strategies
and Federal bodies for grants.				resilience against climate impacts.				
4.5 Investigate implementation of coastal protection measures including dune restoration on Shire managed land.	2030-2035	Medium	Provide; Partner	Restoration activities strengthen dune ecosystems, enhance storm surge buffers, and improve habitat resilience in line with CHRMAP findings.	Manager Operations		DBCA, Yawuru RNTBC	CHRMAP; Minyirr Buru Management Plan
4.6 Investigate coastal areas vulnerable to damage from stormwater flows and implement mitigation measures.	Ongoing	Medium	Regulate; Advocate; Provide	The interface between the Shire's stormwater management and coastal environments should be monitored to avoid environmental damaging consequences, such as the Demco "canyon".	Manager Engineering Land Tenure Officer Manager Operations	Internal	DBCA, Yawuru RNTBC, KPA	CHRMAP; Minyirr Buru Management Plan.



8 Energy

Energy management in the Shire of Broome has changed significantly since the last State of the Environment (SoE) review in 2016. While fossil fuels remain the primary source of electricity, the region has made measurable progress in distributed energy generation, battery storage, electric vehicle infrastructure, and energy efficiency programs. These developments signal a shift from a traditional, centralised system to a more flexible and lower-emission energy profile.

In 2016, Broome's energy system relied heavily on thermal generation, primarily using natural gas and diesel. The Broome Power Station, depended on imported fuels and served as the region's only electricity source. Renewable energy integration was limited by network constraints, particularly in central Broome feeder zones, which restricted rooftop solar uptake. Fewer than 10% of homes had solar PV installed, and commercial installations were constrained by low feed-in tariffs and long payback periods. At that time, the Shire did not have a strategic energy management framework. There were no corporate emissions targets or formal energy efficiency programs, and public engagement on energy issues was limited.


By 2025, this picture has begun to shift. The Broome Power Station, remains the region's central generator, using trucked LNG and diesel. Planning is underway for the Broome Future Energy System (FES), a 90 MW solar photovoltaic and 239 MWh battery project. Once operational, this system is expected to supply most of Broome's electricity needs and significantly reduce reliance on fossil fuels. Independent modelling by Sustainable Energy Now (SEN) shows that a transition to over 80% renewable energy could save more than \$321 million over the system's life. Renewables are projected to generate electricity at about three-quarters the cost of LNG-based generation.

Distributed energy has also expanded. Horizon Power's 2024 launch of the Smart Connect Solar program removed previous technical limits on rooftop PV connections, supporting greater uptake across homes and businesses. Two community-scale batteries have been installed through the Renew the Regions initiative, providing additional capacity and helping to balance grid demand.

Electric vehicle infrastructure is emerging, with the Kimberley's first 150 kW fast-charging station now operating at Broome's Town Beach. A second charging point has been installed along Carnarvon Street in Chinatown. This forms part of the WA Government's regional charging network and supports local interest in low-emission transport.

Energy efficiency is being built into new developments through mandatory six-star building standards for new Class 1 dwellings. Regional programs such as Switch Your Thinking are also providing practical support for households and small businesses to reduce energy use.

Broome's energy future was a key focus of the 2025 Green Horizons Forum, which brought together government, industry, and Traditional Owners to discuss opportunities in renewable



energy, battery storage, and green hydrogen. The event highlighted Broome's strategic role in off-grid energy innovation and the importance of cross-sector collaboration to maintain momentum.

8.1 2016 Situation

In 2016, the Shire of Broome relied heavily on fossil fuels for its electricity supply. Horizon Power operated the regional electricity network, with most power generated through thermal processes using natural gas and diesel at the Broome Power Station. Electricity demand for the town was estimated at around 129 to 131 gigawatt hours (GWh) per year, with diesel contributing significantly to the generation mix.

Renewable energy integration was constrained by network limitations. Technical restrictions within the distribution grid, particularly in feeder zones servicing central Broome, limited rooftop photovoltaic (PV) capacity and slowed the uptake of distributed solar generation. By the mid-2010s, only 8 to 9 per cent of dwellings in Broome had rooftop PV systems, a rate much lower than in other high-irradiance regions. Commercial solar installations were also limited by economic barriers, including feed-in tariffs set well below retail electricity prices, which resulted in long payback periods. At that time, there were no operational large-scale renewable energy projects in the Shire and no significant feasibility studies under way.

Energy management within Shire operations lacked a strategic framework. Energy use was tracked on an ad hoc basis, with little understanding of building performance and no formal energy audits. The Shire had no corporate energy reduction targets or coordinated programs to improve efficiency across its facilities. Street lighting consisted mostly of high-pressure sodium lamps rated at 140 watts per unit, which contributed to high electricity consumption.

The Shire's vehicle fleet was not detailed in the 2016 State of the Environment report. However, there was no evidence of emissions reduction targets, low-emission vehicles, or policies to reduce idling. Broader corporate emissions tracking was also absent, and no formal greenhouse gas reduction or energy efficiency targets were in place for Shire operations.

In the years leading up to 2016, public discussion focused largely on electricity costs rather than climate change or emissions reduction. This overlooked the highly visible community division to the Browse LNG project at James Price Point (Walmadany). Many Traditional Owners, residents, and advocacy groups strongly opposed the project due to its potential environmental, cultural, and social impacts. Apart from this, community engagement on energy issues was limited, with education and outreach activities focusing mainly on simple household actions such as turning off appliances.

In summary, while Broome's solar potential was high, the energy system faced significant barriers in 2016. Network limitations, policy gaps, and limited financial incentives slowed the transition to renewable energy. Without clear strategic leadership at either the organisational or community level, the Shire was not positioned to move towards a lower-emissions energy future.



8.2 2025 Situation

Broome's energy system in 2025 reflects a major shift towards cleaner and more distributed sources of electricity. While infrastructure based on liquefied natural gas (LNG) and diesel remains central to powering the region, new investment in solar energy, battery storage, electric vehicle infrastructure, and demand-side programs is laying the foundation for a more sustainable and resilient energy future.

Grid Supply and Centralised Generation

The Broome Power Station remains the main source of electricity for the town and surrounding areas. Operated by EDL and commissioned in 2008, the facility includes 17 gas-fired generators and nine diesel backup generators, with a combined installed capacity of 43.2 megawatts (MW). Power is produced using LNG trucked about 900 kilometres from the Maitland LNG plant near Karratha, stored and vaporised at a dedicated facility in Broome, and distributed through local networks.

To reduce long-term reliance on fossil fuels, Horizon Power referred the FES proposal to the Environmental Protection Authority who, upon receiving the referral, decided not to assess the proposal. A referral was also sent to the Federal Government Department of Climate Change, Energy, the Environment and Water (DCCEEW) who are still currently assessing the proposal. This project will include up to 90 MW of ground-mounted solar photovoltaic (PV) generation and up to 42 MW / 239 megawatt hours (MWh) of battery storage. Proposed to be located about 10 kilometres north of Broome, the system will connect to the existing Frederick Street substation. Once operational, it is expected to meet most of Broome's electricity demand and allow the existing gas plant to operate primarily as a backup.

Independent modelling by Sustainable Energy Now (SEN) shows that supplying more than 80 per cent of Broome's electricity from renewable energy is technically feasible and economically beneficial. The study estimates lifetime cost savings of more than \$321 million, with renewable energy projected to produce electricity at about three-quarters the cost of LNG-based generation.

Distributed Energy and Storage

Rooftop solar continues to grow in Broome, supported by Horizon Power's Smart Connect Solar program. Rolled out across the Kimberley region in 2024, the program uses dynamic voltage management to remove earlier technical limits on rooftop PV connections. This change has allowed more homes and businesses to install solar systems, lowering household energy bills and improving network performance.

Two community-scale battery systems have been installed under Horizon Power's Renew the Regions initiative. These batteries provide more than 1.4 MW of hosting capacity for new solar customers, storing excess generation during the day and releasing it in the evening to reduce demand peaks.



Electric Vehicles and Charging Infrastructure

Broome now has the Kimberley's first public electric vehicle (EV) fast-charging station, installed at the Town Beach car park in July 2023. The 150-kilowatt charger, installed as part of the WA Government's EV Network rollout, allows drivers to recharge in 20 to 30 minutes and links Broome to a state-wide charging corridor.

Energy Efficiency and Demand Management

Energy efficiency remains a priority for households and new developments. Under Western Australia's Building Code, all new Class 1 dwellings must achieve a minimum six-star energy efficiency rating. The Shire continues to apply these standards through the development assessment and building approval process.

In 2025, the Switch Your Thinking initiative launched an Energy Efficiency Pilot Program (EPPP) targeting regional towns including Broome. The program provides free energy audit kits for households, practical workshops for small businesses, and tailored advice on reducing electricity use. These efforts aim to raise community awareness and encourage behaviour change, especially for households unable to invest in solar systems.

Looking Ahead

Broome's location and strong solar resources position it as a leader in off-grid renewable energy adoption. The 2025 Green Horizons Forum, hosted by local and regional stakeholders, explored opportunities for Broome and the Kimberley to become a hub for renewable energy innovation. Topics included large-scale solar and wind, distributed battery storage, green hydrogen development, and Indigenous-led clean energy partnerships. The forum highlighted the importance of collaboration between government, industry, and Traditional Owners to achieve long-term environmental and economic benefits.

8.3 Energy – Change Assessment Summary

Indicator ratings reflect current condition relative to 2016 baseline; trend arrows show movement; confidence grades evidence strength

Table 8.1 - Indicators (Energy & Emissions)

Indicator	2016 Baseline	2025 Snapshot	Trend	Confidence in Trend	Rating	Confidence in Rating
Electricity Supply Mix	Dominated by LNG and diesel at Broome Power Station; no large-scale renewables	LNG remains the primary energy source, but Horizon Power's proposed <i>Broome Future Energy System</i> includes up to 90 MW of ground-mounted solar PV and a 239 MWh battery, designed to displace most fossil fuel generation while retaining existing gas units for backup and firming.	▲	High	Fair	High
Rooftop PV Uptake	8–9% of households had rooftop solar; network constraints limited further growth	Smart Connect Solar removed constraints; ongoing adoption across residential and commercial sectors	▲	Medium	Good	Medium
Commercial-scale Renewables	No major projects or feasibility studies reported in SoE	The Broome Future Energy System (FES) project has received no assessment from the EPA and is currently being assessed by DCCEE. Independent modelling by Sustainable Energy Now (SEN) indicates	▲	High	Good	High

Indicator	2016 Baseline	2025 Snapshot	Trend	Confidence in Trend	Rating	Confidence in Rating
		that high levels of renewable energy penetration—potentially exceeding 80%—are technically feasible in Broome under scenarios involving large-scale solar PV and battery storage. Actual outcomes will depend on project implementation and operational factors				
Community-scale Battery Storage	Not referenced in 2016 SoE	2 systems installed under Renew the Regions; 1.4 MW capacity for peak smoothing and PV hosting	▲▲	High	Good	High
Public EV Charging Infrastructure	No infrastructure or planning in place	First 150 kW fast charger installed at Town Beach in 2023	▲▲	High	Fair	High
Corporate Energy Strategy	No energy audits or reduction targets; ad hoc monitoring	General energy efficiency goals included in corporate plans; no evidence of specific targets or audits	▲	Medium	Fair	Medium
Residential Energy Efficiency	No detail in 2016 SoE, but minimum 6-star ratings required by Building Code WA	Continued compliance with 6-star NatHERS rating; supported by audits and workshops	▲	Medium	Fair	Medium
Community Engagement on Energy	Limited to cost-related concerns; minimal outreach	Programs now include audit kits, local business workshops, and community education	▲▲	Medium	Good	Medium

Indicator	2016 Baseline	2025 Snapshot	Trend	Confidence in Trend	Rating	Confidence in Rating
Carbon Emissions Reduction	No formal targets	SEN modelling suggests that transitioning Broome's electricity system to high levels of renewable energy—through solar PV and battery storage—could significantly reduce LNG usage and associated carbon emissions. Exact emissions savings will depend on project implementation.	▲	High	High	High

8.4 EMP Actions (2025-2035)

Objective

To reduce energy consumption and greenhouse gas emissions across Shire operations and the wider community by promoting energy efficiency, transitioning to renewable energy sources, and supporting low-carbon initiatives that align with climate adaptation and mitigation goals.

Table 8.2 - EMP Actions (Energy & Emissions)

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resourcing Requirements	Proposed Partnerships	Linked strategies
5.1 Facilitate implementation of Broome Future Energy System (FES)	Ongoing	High	Facilitate; Advocate	The FES project includes up to 90 MW solar and 239 MWh of battery storage. Supporting approvals, land-use planning,	Manager Planning and Building	Internal	Horizon Power	Economic Development Strategy 2021-2026

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resourcing Requirements	Proposed Partnerships	Linked strategies
through provision of technical support.				and community engagement will accelerate the energy transition and reduce reliance on fossil fuels.				
5.2 Facilitate feasibility investigation of energy audit in Shire owned buildings and facilities and implement energy saving measures where feasible.	2028-2032	High	Facilitate	Upgrading public infrastructure, including converting HPS streetlights to LEDs and improving HVAC systems, reduces municipal energy demand, demonstrates leadership, and improves energy efficiency indicators.	Manager Engineering Manager Facilities	\$15k-\$45k	Horizon Power	Asset Management Plan
5.3 Advocate for Department of Transport to subsidise improved public transport options in Broome	Ongoing	Medium	Advocate	Broome does not have a public transport system. This presents challenges to the growing size of the town, especially for people without access to a personal vehicle or unable to drive (youth & seniors). Community engagement revealed a strong design for reducing car dependency in the town and securing a reliable public transport route for the town	Economic Development Officer	Internal	Department of Transport	Council Plan 2025-2035

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resourcing Requirements	Proposed Partnerships	Linked strategies
				would contribute to this outcome.				
5.4 Provide corporate emissions inventory and confirm a baseline year to begin recording against.	2029-2033	High	Provide	Current Shire documents lack quantitative energy or emissions targets. Embedding these in the next Corporate Business Plan will improve governance, transparency, and accountability.	Manager Waste Services; Manager Operations; Manager; Manager Engineering	\$20k-\$45k	Horizon Power Water Corporation	
5.5 Facilitate Horizon Power in promoting and facilitating land access for community-scale battery systems.	Ongoing	Medium	Facilitate	Supporting additional deployments of community batteries under Horizon Power's programs will enhance local grid stability, enable greater solar hosting capacity, and support distributed energy uptake.	Manager Planning and Building Land Tenure Officer	Internal	Horizon Power	Economic Development Strategy 2021-2026
5.6 Facilitate gradual transition of Shire's vehicle fleet to hybrid and electric alternatives, where appropriate and applicable.	2026-2035	Medium	Facilitate; Fund	Electrifying the Shire fleet aligns with WA Government EV strategy and supports emissions reduction. Transitioning vehicles as suitable replacements arise	Manager Operations	\$43k-97k per vehicle.		

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resourcing Requirements	Proposed Partnerships	Linked strategies
				ensures practicality and cost control.				
5.7 Facilitate implementation of solar power opportunities at Shire operated facilities and reserves.	2026-2035)	Medium	Provide	Solar PV on public facilities and reserves can reduce operating costs and demonstrate leadership. Prioritising large facilities maximises cost-effectiveness and visibility while supporting emissions reduction goals.	Manager Engineering; Manager Community Facilities	TBC (dependent on facility/reserve - installation of solar at BRAC cost \$220k)	Horizon Power	Council Plan 2025-2035
5.8 Provide a database/website that residents can utilise as a resource for accessing useful information to support sustainability goals and practices.	2026	Medium	Provide	Community volunteer groups and residents expressed a desire for the Shire to demonstrate leadership in the environmental space. Establishing a database through the Shire's website, that provides frequent updates on environmental initiatives within the community and clear, accurate sources of information will help support the community and volunteer groups understanding and developing environmental initiatives. Through this, the	Land Tenure Officer Marketing and Communications Coordinator	Internal		Corporate Communication and Engagement Strategy 2022-2027

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resourcing Requirements	Proposed Partnerships	Linked strategies
				Shire can act as a bridge between the community and access to important and up-to-date environmental information and news which they can then leverage for their own means.				
5.9 Advocate for Horizon Power to increase percentage of Broome community's source of energy from renewable energy sources.	Ongoing	Medium	Advocate	Community engagement found strong support for a transition to renewable energy and away from high carbon emission energy sources. Advocating for Horizon Power to continue developing and finding renewable energy opportunities that supply the Broome community will ensure the community can have access to sustainable sources of energy that align with their values.	CEO	Internal	Horizon Power	Council Plan 2025-20235



9 Waste Management

Waste management remains a significant and evolving environmental issue for the Shire of Broome. In 2016, the system faced major challenges, including limited landfill capacity, high contamination in the recycling stream, no diversion of organic waste, and minimal public reporting. Buckley's Road landfill, the Shire's main disposal site, was nearing capacity and lacked engineered systems to manage leachate or gas. Recycling contamination rates regularly exceeded 25 per cent, with audits showing large amounts of organic and construction waste in the general waste stream. Illegal dumping was common, and community awareness of waste processes and outcomes was low. Overall, waste management was rated as Poor in the 2016 State of the Environment assessment, with Medium confidence.

By 2025, the Shire has implemented several planning and infrastructure initiatives to improve waste outcomes. These include the staged closure of Buckley's Road landfill and the development of the Regional Resource Recovery Park (RRRP), which will provide a modern and environmentally sound facility. Kerbside collection services for general waste and recycling have continued; however, high contamination rates remain a major barrier to improved recovery. A Food Organics and Garden Organics (FOGO) collection service has not yet been introduced, despite increasing public interest and alignment with waste reduction goals.

Community engagement in 2025 highlighted ongoing concerns about illegal dumping, limited public reporting, and a lack of education on correct bin use. Residents also raised issues about inconsistent services in remote areas, along with the visual and environmental impacts of the new RRRP.


Strategic documents such as the Waste Action Plan 2021–2025 and the Waste Management Strategy 2021–2031 provide a clear policy framework. However, implementation has been challenged by limited resources, rapid population growth, and increasing visitor numbers.

This section outlines the current waste management system, identifies changes since the last assessment, and evaluates the key challenges and opportunities for achieving better environmental outcomes.

9.1 2016 Situation

In 2016, the Shire of Broome's waste management system was under increasing pressure due to population growth, seasonal tourism, and ageing infrastructure. The system relied heavily on landfill disposal, with limited local recycling capacity and no program for diverting organic waste. The State of the Environment (SoE) Report identified two major themes under waste: Household Waste and Litter and Illegal Dumping.

Using the Pressure-State-Response (PSR) model, the report highlighted operational constraints, environmental risks, and gaps in strategic planning that limited progress towards sustainable



waste management. Core challenges included ageing infrastructure, low recycling rates, environmental risks, and limited public engagement. The SoE Report called for urgent improvements, including investment in infrastructure, the introduction of organic waste diversion, stronger community education, and a strategic waste plan with measurable performance indicators. Addressing these issues was seen as essential to support Broome's growing population and align with broader sustainability goals.

Landfill Infrastructure and Environmental Risks

The primary disposal site at Buckley's Road, in operation since 1993, was nearing capacity, with less than five years of remaining airspace. The site lacked key environmental controls such as engineered liners for leachate containment and systems for capturing landfill gas. Cover material was applied regularly, but wet season erosion, particularly on batter slopes, often caused plastic and lightweight litter to escape into nearby pindan vegetation. Concerns were raised about odour, litter, and containment, although no formal improvement notice was issued by the Department of Water and Environmental Regulation in 2014.

Projected landfill gas generation was low, so management requirements were limited to passive systems, potentially including a biofilter. Groundwater monitoring was undertaken quarterly, with results showing no significant concerns.


Kerbside Collection and Recycling Performance

Broome households received weekly collection of 240-litre red-lid general waste bins and fortnightly collection of 240-litre yellow-lid recycling bins. Recycling performance was affected by high contamination rates, including broken glass, bagged recyclables, and food-soiled materials. There was no Food Organics and Garden Organics (FOGO) service, even though organic waste made up a significant proportion of material sent to landfill. This led to decomposition without oxygen, producing methane and contributing to greenhouse gas emissions.

Construction and demolition (C&D) waste was also a major component of landfill inputs. While stockpiling for future reuse was approved, the lack of on-site crushing equipment meant most C&D material was still disposed of in landfill, limiting opportunities for resource recovery.

Illegal Dumping and Litter Management

Illegal dumping and littering were common, particularly in bushland and unmonitored areas. The Keep Australia Beautiful National Litter Index (2015) ranked Cable Beach among the ten most littered beaches in Western Australia, with beverage containers identified as a frequent pollutant. Cyclone events further increased debris and waste, although no incident-specific data was publicly reported.



Local enforcement was limited, with few surveillance or compliance mechanisms in place. Public education on illegal dumping was minimal, and responses were focused on short-term clean-ups rather than long-term prevention.

Governance, Education and Reporting

Communication on waste issues was ad hoc and largely limited to signage and occasional advertisements in the Broome Advertiser. There was no publicly available annual waste report, and Elected Members were primarily updated during budget sessions. This lack of transparency and community engagement made it difficult to build support for waste reduction or behaviour change.

The 2016 SoE Report highlighted key gaps in strategic planning, including:

- No landfill gas monitoring or leachate containment systems
- No contamination audits or reliable waste composition data
- Minimal organic or bulky waste recovery
- No forward-looking waste diversion targets or sustainability benchmarks

Without accurate data, the Shire lacked the evidence needed to plan, fund, and deliver effective waste management improvements.

9.2 2025 Situation

Waste management within the Shire of Broome remains a complex and evolving challenge. Since the 2016 State of the Environment Report, the Shire has made progress through new strategies and infrastructure planning. However, several challenges remain, including limited landfill capacity, high recycling contamination rates, the absence of a dedicated organics diversion service, and ongoing service concerns in remote communities.


While waste services in remote communities are primarily managed by the Department of Communities, the Shire continues to receive feedback on these issues through consultation and engagement processes.

This section provides an updated assessment of current systems, infrastructure, community feedback, and strategic priorities. It draws on the Shire's Waste Action Plan 2021–2025, Waste Strategy 2021–2031, recent engagement findings, and public communications.

Waste Systems and Infrastructure

Kerbside Collection Services

The Shire provides weekly collection of general waste and fortnightly collection of co-mingled recycling within the Broome townsite through contracted service providers. Collected recyclables are manually sorted at the local Materials Recovery Facility before being transported to Perth for final processing. Crushed glass is currently stockpiled for future reuse.



Recycling contamination remains a major barrier to efficient material recovery. Common contaminants include:

- Broken glass, which disrupts the sorting process
- Bagged recyclables, which reduce efficiency and are often landfilled as whole bags
- Nappies, fish frames, batteries, and offal, which cause direct contamination
- Food-soiled paper, which affects the viability of recovered paper.

Despite strong community support, a Food Organics and Garden Organics (FOGO) collection service has not yet been introduced. Organic waste, including food scraps and garden debris, continues to make up a large portion of landfill inputs, producing methane as it decomposes without oxygen and contributing to greenhouse gas emissions.

Landfill Management and Transition Planning

The Buckleys Road Waste Management Facility, operational since 1993, is nearing the end of its life. A Landfill Closure Management Plan (2025) has been developed to guide staged capping, installation of leachate and landfill gas controls, and ongoing environmental monitoring after closure.

To meet long-term waste management needs, development is underway for the Regional Resource Recovery Park (RRRP), located approximately 12 kilometres northeast of Broome. Planned facilities include:

- A Class III landfill
- A Community Recycling Centre
- Dedicated areas for inert waste processing and future resource recovery technologies.

The RRRP is designed to support the Shire's disposal and recovery needs over a 70-year horizon.

Community Engagement and Feedback


Transparency and Public Education

Community feedback collected during engagement activities revealed a clear desire for greater transparency in the Shire's waste operations. Key concerns included:

- A lack of consistent signage and disposal guidance at facilities
- Insufficient education on correct bin use and recycling protocols.

Residents expressed support for the introduction of dashboard-style reporting tools, improved signage, and targeted education campaigns to improve user behaviour and material recovery rates.

Illegal Dumping and Litter Management



Illegal dumping remains a prominent issue, particularly in bushland, coastal reserves, and peri-urban areas. Contributing factors include:

- Disposal costs for certain waste types
- Limited enforcement capacity within the Shire

While the Shire continues to offer pre-cyclone waste drop-off weekends, these services do not extend to kerbside collection and can be difficult to access for remote areas. Recent engagement with property owners at 12 Mile and Coconut Wells found that 80 per cent of respondents voted against the introduction of a kerbside collection service, limiting options for alternative waste management in these localities.

Strategic Direction and Operational Constraints

The Shire's Waste Action Plan (2021–2025) and broader Waste Strategy (2021–2031) set out a structured pathway toward improved waste performance. Key strategic priorities include:

- Reducing reliance on landfill through increased diversion and reuse
- Expanding public education and behaviour change programs
- Developing systems for waste tracking, reporting, and performance benchmarking
- Finalising and operationalising the RRRP as a regional-scale solution.


However, several constraints continue to impede implementation:

- Rapid population growth and residential expansion are placing additional strain on existing waste systems
- Tourism-driven waste surges, particularly in peak season, challenge operational consistency
- Funding limitations have delayed the rollout of key infrastructure and service enhancements

Improving Waste Performance

The Shire of Broome's Waste Strategy 2021–2031 and Waste Action Plan 2021–2025 outline a clear pathway to improve waste management performance across the region. The long-term strategy focuses on reducing reliance on landfill by increasing waste diversion and reuse, expanding public education programs to encourage behaviour change, and developing systems for waste tracking, reporting, and benchmarking. A key priority is the completion and operation of the Regional Resource Recovery Park (RRRP), which will serve as a modern, regional-scale facility to support disposal and resource recovery for decades to come.

Despite this clear direction, several challenges are affecting implementation. Population growth and residential expansion are placing additional pressure on existing waste systems, while peak



tourism seasons bring sharp increases in waste volumes. Funding limitations have also delayed the rollout of essential infrastructure and service improvements. Addressing these constraints will be critical to achieving the Shire’s long-term waste management goals and ensuring services remain effective and sustainable.

9.3 Change Assessment Summary

Indicator ratings reflect current condition relative to 2016 baseline; trend arrows show movement; confidence grades evidence strength.

Table 9.1 - Indicators (Waste Management)

Indicator	2016 Baseline	2025 Snapshot	Trend	Conf. Trend	Rating	Conf. Rating
Landfill capacity and infrastructure	Buckley's Road landfill near capacity; no closure plan; no gas or leachate control	Buckley's Road landfill now under closure plan; RRRP under development	▲	Medium	Fair	High
Kerbside service coverage	Weekly waste and fortnightly recycling in Broome townsite only	Same coverage, contractor Cleanaway; consistent but limited-service scope	→	High	Fair	High
Recycling contamination	Contamination >25%, including bagged recyclables, broken glass, food-soiled paper	Persistent contamination of co-mingled recycling; still exceeds acceptable thresholds	▼	High	Poor	High
Organics (FOGO) collection	No FOGO collection; organics made up ~45% of residual waste	No FOGO system despite community interest and alignment with strategy	→	High	Poor	High
Illegal dumping incidence	Chronic issue, ~24 reports/month; dumping in bushland, spikes after cyclones	Still present; community feedback highlights enforcement gaps.	→	Medium	Poor	Medium

Indicator	2016 Baseline	2025 Snapshot	Trend	Conf. Trend	Rating	Conf. Rating
Public reporting and transparency	No public reporting; councillors received tonnages only during budget planning	Statistics are provided as part of the waste education incursion sessions and social media pieces, performance metrics summaries in Shire's annual report.	▲	Medium	Fair	Medium
Service equity (remote areas)	Limited services beyond townsite; remote areas poorly serviced	Remote communities still report inadequate services	→	Medium	Poor	Medium
Strategic planning and implementation	No strategic waste plan; fragmented direction	Clear strategy exists, but some delivery delayed by resourcing and infrastructure timelines	▲	High	Fair	High

9.4 EMP Actions (2025-2035)

Objective

To minimise waste generation, improve resource recovery, and reduce environmental impacts through sustainable waste management practices, community education, and enhanced infrastructure, supporting a circular economy approach across the Shire.

Table 9.2 - EMP Actions (Waste Management)

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resource Requirements	Proposed Partnerships	Linked strategies
6.1 Provide a Regional Resource Recovery Park (RRRP) and close Buckley's Road landfill.	2026-2030	High	Provide	The RRRP will provide long-term waste infrastructure with improved environmental controls, replacing Buckley's Road landfill and supporting regional capacity for the next 70 years.	Manager Waste Management	Funding allocated.		Waste Management Strategy; Local Planning Strategy 2023; Council Plan 2025
6.2 Facilitate reduced recycling contamination through education and	Ongoing	High	Facilitate	High contamination continues to impact recycling. Education, clearer bin labelling, and updated protocols are essential to	Manager Waste Management	Internal	Department of Education	Waste Management Strategy

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resource Requirements	Proposed Partnerships	Linked strategies
improved collection protocols				improve diversion rates and public understanding.	Waste Education Officer			
6.3 Provide a litter and illegal dumping plan that includes capturing costs and identifying hotspots associated with illegal dumping and supports the Waste Management Strategy.	2028-2032	Medium	Provide; Partner	Illegal dumping remains a challenge, especially post-cyclone. Enhanced enforcement, paired with the existing online reporting platform, will deter dumping and improve accountability.	Manager Waste	Internal	DBCA; DPLH	Waste Management Strategy
6.4 Facilitate continued to expand construction and demolition waste processing infrastructure at the RRRP.	Ongoing	Medium	Facilitate; Provide	C&D recovery currently in place, scrap metal, concrete is diverted and stored for recycling. Currently mechanical sorting of waste at the tip face is occurring where recoverable C&D material is recovered from landfill.	Manager Waste Management	Internal		Waste Management Strategy
6.5 Provide a report and improve on annual statistics and waste reporting.	Ongoing	High	Provide	The public lacks clear visibility of waste performance. Dashboards and regular reporting will increase community engagement, transparency, and informed decision-making.	Manager Waste Management	Internal		Waste Management Strategy

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resource Requirements	Proposed Partnerships	Linked strategies
6.6 Provide a review of the Waste Management Strategy	2026	High	Provide	A strong strategy exists, but implementation has been slow. Establishing clear KPIs and regular review cycles will ensure accountability and steady progress toward targets.	Manager Waste Management	\$50k allocated (refer to Council Plan)		Waste Management Strategy; Local Planning Strategy 2023; Council Plan 2025-2035
6.7 Advocate for remediation of contaminated land	Ongoing	Medium	Advocate	Several contaminated land sites are scattered around the Shire, presenting public health risks to the community. Many of these land parcels are under State management and therefore, responsibility for facilitating remediation falls upon the Department of Water and Environmental Regulation and Department of Planning, Lands and Heritage.	Waste Manager CEO	Internal	DPLH; DWER	Local Planning Strategy 2023
6.8 Investigate opportunities for monitoring noise, dust and odour emissions	2029-2034	Low	Facilitate; Provide	EPA guidelines on social surroundings states that emissions such as noise, dust and odour may generate cumulative emissions which can	Manager Environmental Health, Emergency and Rangers	\$60k-\$120k	KPA; Broome International Airport; DWER	

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resource Requirements	Proposed Partnerships	Linked strategies
from key industrial precincts.				impact the amenity and wellbeing of surrounding communities. Monitoring will improve understanding of the cumulative impact of these emissions.				



10 Climate Change

This chapter introduces climate change as a new theme in the Shire of Broome's reporting framework, recognising its increasing importance in local governance and planning. In the 2016 State of the Environment Report, climate risks were acknowledged within broader themes such as energy, coastal management and emergency planning, but there was no dedicated adaptation framework.

This chapter evaluates developments from 2016 to 2025, tracking progress in policy and planning while highlighting ongoing challenges in governance, targeted measures and resource allocation. The aim is to establish priorities for a more integrated and strategic approach to climate adaptation in the future.

In 2016, climate change was not addressed through a standalone chapter. Instead, climate risks were considered indirectly under other themes. Coastal vulnerability was assessed through a 2014 Coastal Vulnerability Study, but its recommendations had no firm timeframes or funding commitments. Energy-efficiency measures, such as passive-solar design and six-star Building Code of Australia (BCA) ratings for new dwellings, were promoted through state planning policies. However, there was no greenhouse gas inventory or emissions-reduction targets. Emergency management focused on cyclones and storm surge, with no plans for heatwaves or outreach to vulnerable groups. Health considerations were limited to statutory references without climate-specific actions. Overall, adaptation governance was early-stage and reactive, with responsibilities scattered across different Shire directorates and no coordinated, multi-agency approach.

By 2025, adaptation measures remain spread across energy planning, coastal management and emergency planning, rather than brought together under a single strategy. The Broome Townsite Coastal Hazard Risk Management and Adaptation Plan (CHRMAP), adopted in 2017, continues to guide shoreline setbacks and infrastructure controls. It is currently under review, with updated sea-level rise and storm-surge guidelines expected by 2026. The Shire's Council also resolved to be a signatory for the WALGA Climate Change Declaration in October 2020, indicating its commitment to developing locally appropriate mitigation and adaptation strategies to manage climate change.

Mandatory six-star BCA ratings and solar-passive design are now embedded in building control, but the regional electricity network still relies on diesel backup generation and large-scale renewable energy remains limited. Public health planning has advanced only slightly, with general heatwave messaging added to the Community Safety Plan but no formal protocols for vulnerable groups. Flooding of parks and pathways continues to affect community infrastructure, while the Stormwater Management Strategy remains unfunded and incomplete. Community stakeholders have advocated for nature-based solutions, such as a Significant Tree Register and mangrove-buffer restoration, but these proposals are still under consideration.



10.1 2016 Situation

In 2016, the Shire of Broome's State of the Environment Report did not include a dedicated climate change chapter. However, several sections addressed mitigation and adaptation issues indirectly. Community engagement in 2015–16 revealed growing public concern about changing weather patterns, but the report did not establish formal targets or detailed response protocols. Instead, climate risks were implied within themes such as energy, coastal management and emergency planning, reflecting an early and largely reactive approach.

Mitigation of greenhouse gas emissions was primarily addressed through sustainable design and energy-efficiency measures. The report supported subdivision layouts and street orientations that maximised passive-solar outcomes, guided by State Planning Policy 3.1 (Residential Design Codes), Liveable Neighbourhoods, and the Shire's Structure Plans and Subdivision Standards. From 1 May 2012, all new dwellings were required to meet a minimum six-star Building Code of Australia (BCA) rating. This included features such as thermal insulation, shading, glazing orientation and improved air-seal integrity. The Shire reinforced these standards through local policies that encouraged shaded outdoor living areas and breezeways.


Adaptation planning was at an early stage. The 2014 Coastal Vulnerability Study mapped erosion and inundation risks but did not include timeframes or funding commitments for its recommendations. Emergency management plans remained focused on cyclones and storm surge, with no protocols for heatwaves or outreach to vulnerable groups. These gaps left the community exposed to a wider range of climate-related hazards.

The Shire complied with the Health Act 1911, which sets out local government responsibilities for public health and environmental health. However, the 2016 report did not include specific climate-health actions such as heatwave alerts or targeted support for at-risk populations. This highlighted an opportunity to better integrate public health with climate adaptation, for example through early warning systems or designated cooling centres.

In summary, climate change was addressed indirectly within other chapters of the 2016 report. Design-based mitigation and energy-efficiency standards were clear successes, but the absence of formal emissions targets, heatwave response protocols and integrated health planning demonstrated the need for a more structured and coordinated climate change framework.

10.2 2025 Situation

As of 2025, climate change adaptation measures remain integrated across several service areas—particularly energy planning, coastal management and emergency planning—rather than being consolidated under a single, comprehensive strategy. The Broome Townsite Coastal Hazard Risk Management and Adaptation Plan (CHRMAP), first adopted in 2017, continues to guide shoreline setbacks and foreshore infrastructure. It is now under review, with updated sea-level and storm-surge guidelines expected by late 2026. However, no stand-alone climate adaptation strategy has been developed to bring these efforts together.



Measurable targets and detailed response protocols are still to be defined. Community engagement and recent surveys show that residents are increasingly concerned about shifting weather patterns, yet the Shire has not established specific benchmarks such as heatwave preparedness targets, coastal-erosion thresholds or stormwater-management triggers. This lack of metrics makes it difficult to embed climate risk in planning documents or coordinate responses between agencies.

Coastal vulnerability remains a priority issue. While the CHRMAP sets out staged controls, including prescribed shoreline setbacks, local feedback indicates that coastal erosion is worsening in areas such as Cable Beach and that mangrove health is declining. Marine heat events, such as coral bleaching, are also not yet addressed in on-ground adaptation measures.

On the energy front, the Shire has strengthened mitigation through mandatory seven-star BCA ratings and solar-passive design requirements for new developments. These aim to reduce future energy demand from buildings. However, the regional electricity network still relies heavily on diesel backup generation, and large-scale renewable energy projects remain limited beyond small photovoltaic pilot projects led by the Shire.

Public health planning has advanced only slightly. The Broome Community Safety Plan now includes general messaging about heatwaves and mentions cooling centres, but it does not set formal protocols or identify outreach programs for vulnerable groups such as seniors or outdoor workers.

Infrastructure challenges persist, particularly in low-lying areas. Parks and pathways continue to flood following heavy rainfall events. The Shire's comprehensive Stormwater Management Strategy remains in the planning stage and has not fully commenced.

Community stakeholders have called for nature-based solutions to be integrated into policy. Suggestions include establishing a Significant Tree Register to improve shade and flood mitigation and restoring mangroves to reduce coastal erosion. These proposals are still being considered and have not yet been adopted into formal Shire policies.

10.3 Change Assessment Summary

Indicator ratings reflect current condition relative to 2016 baseline; trend arrows show movement; confidence grades evidence strength.

Table 10.1 - Indicators (Climate Change)

Indicator	2016 Baseline	2025 Snapshot	Trend	Conf. Trend	Rating	Conf. Rating
Dedicated adaptation framework	No stand-alone climate strategy: adaptation embedded in energy, coastal and emergency themes	Still no comprehensive strategy; measures remain distributed across service areas	▲	High	Poor	High
Formal adaptation targets/protocols	None defined (no GHG targets, heatwave or erosion protocols)	None defined (no benchmarks for heatwaves and stormwater erosion)	→	High	Poor	High
CHRMAP implementation	Coastal Vulnerability Study completed 2014; CHRMAP initiated but not yet adopted	CHRMAP adopted 2017; under formal review with updated sea-level/storm-surge guidelines due 2026	▲	High	Very Good	Medium
Energy-efficiency & transition	BCA 6-star and passive-solar design promoted; no formal renewables beyond pilots	Seven-star BCA & solar-passive mandated under LPS7; network still reliant on diesel backup; renewables remain limited	▲	High	Fair	Medium
Public-health / heatwave adaptation	No heatwave protocols in emergency plans	Community Safety Plan 2021–25 includes only high-level messaging; no formal vulnerable-group protocols	→	High	Poor	Medium

Indicator	2016 Baseline	2025 Snapshot	Trend	Conf. Trend	Rating	Conf. Rating
Stormwater management	WSUD principles noted; limited on-ground action; no strategy	District Stormwater Management Strategy proposed; flooding persists in vulnerable areas.	▲	Medium	Poor	Medium
Natural-system solutions	No policy on tree protection or mangrove buffers	Significant Tree protection under consideration; mangrove-buffer restoration under consideration	▲	Medium	Poor	Medium
Community perception of progress	Not measured in 2016	Only 2 % report significant progress; 46 % report no change or decline	▼	High	Poor	High

10.4 EMP Actions (2025-2035)

Objective

To strengthen the Shire's capacity to respond to a changing climate by addressing the wide-ranging and compounding impacts it has on local ecosystems, biodiversity, water resources, and community wellbeing. This includes reducing emissions, embedding climate risk into planning and decision-making, and implementing adaptation measures that protect natural assets, cultural values, and the resilience of the region's people and environment.

Table 10.2 - EMP Actions (Climate Change)

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resource Requirements	Proposed Partnerships	Linked strategies
7.1 Provide an internal assessment of Shire's climate hazard preparedness and identify any gaps that require mitigation	2027-2031	High	Provide	A dedicated Strategy will unify dispersed climate actions, clarify governance and assign responsibilities—addressing gaps highlighted by the WA Local Government Association's 2018 Climate Governance Assessment.	Manager of Environmental Health, Emergency and Rangers; Manager Planning and Building Service	Internal	WALGA; DFES; Department of Communities	CHRMAP; Risk Management Plan - Strategic Risks (2022); Local Planning Strategy 2023
7.2 Advocate to State and Federal Governments to	Ongoing	High	Advocate	There are over 80 remote Aboriginal Communities in the Shire. These are largely serviced	Land Tenure Officer	Internal	DFES; Department of	Local Planning Strategy 2023

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resource Requirements	Proposed Partnerships	Linked strategies
implement climate change mitigation measures to protect remote Aboriginal Communities.				by the State Government and through contracted services. Many of these communities have poorer levels of service and the Shire should advocate for improved levels of services, especially with regards to ensuring emergency services can be adequately provided in the event of a climate related emergency such as extreme flooding, bushfires or cyclones.	Manager Planning and Building Service CEO		Communities; DBCA; Water Corporation; Horizon Power; KDC; RDA; other service providers	
7.3 Provide a Public Health Plan that includes consideration for climate change threats, and mitigation measures	2026-2029	Low	Provide	Embedding heat-health outreach, early-warning systems and the regular operation of cooling centres addresses urban-heat risks and fulfils Public Health Act requirements.	Manager of Environmental Health, Emergency and Rangers	\$50k	Department of Communities & DFES	Community Safety Plan; Local Planning Strategy 2023
7.4 Facilitate education and engagement opportunities that help residents and businesses	2026-2035	Medium	Facilitate / Advocate	Educational workshops and resources build local capacity to understand and respond to climate risks, reinforcing	Manager Community Engagement Manager of Environmental	Internal	Department of Education	Corporate Communication and Engagement

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resource Requirements	Proposed Partnerships	Linked strategies
understand climate risks, reduce emissions, and adapt to changing conditions.				stakeholder calls for greater climate literacy.	Health, Emergency and Rangers Economic Development Officer			Strategy 2022-2027
7.5 Facilitate securing external funding for priority adaptation projects	Ongoing	Medium	Advocate	Actively pursuing State and Federal grants will unlock critical resources for infrastructure upgrades and community programs, addressing the current funding gap.	Special Projects Coordinator	Internal		
7.6 Provide a web platform for the State of the Environment to facilitate information sharing, knowledge and environmental responsibilities to the community.	2026	Medium	Provide; Facilitate	Community engagement revealed that the community's perceived understanding of the Shire's roles and responsibilities could be better informed. This could be improved by having a dedicated webpage on the Shire's website which provides useful information to State Government websites and other resources to help the community find relevant information and stay informed.	Land Tenure Officer; Marketing and Communications Coordinator	Internal		Corporate Communication and Engagement Strategy 2022-2027

Action	Timeframe	Priority	Shire Role	Rationale	Proposed Responsible Officer	Predicted Resource Requirements	Proposed Partnerships	Linked strategies
7.7 Provide a climate adaptation and/or mitigation plan.	2028-2032	Medium	Provide	A climate adaptation and/or mitigation plan will provide oversight of the Shire's strategic direction for addressing climate change. It will also standard practice among WA local governments and demonstrates a commitment to addressing climate change risks to the community, as a signatory to the WALGA Climate Change Declaration.	Land Tenure Officer	\$40k-\$60k	WALGA	CHRMAP; Risk Management Plan – Strategic Risks (2022); Local Planning Strategy 2023.

11 APPENDIX A: Audit Status of 2016 Report

11.1 Land

Total Actions Reviewed: 5

Implemented or Ongoing: 2

Not Fully Implemented or Unclear: 3

Objective: Land resources are collaboratively managed to sustain their cultural, social, environmental and economic values.		
Strategies:		
<ol style="list-style-type: none"> 1. Incorporate natural resource management and environmental considerations into the Shire's planning processes. 2. Achieve improvements in locations where Shire-managed land has been degraded. 3. Build and maintain relationships and partnerships with traditional owners and other land managers to deliver improved environmental outcomes. 		
Response: Strategic/Operational	Comment	Status
Strategic: Facilitate and participate in collaborative, multi-stakeholder landscape-scale conservation measure for land that the Shire has a management obligation for.	Over the past 10 years the Shire has continued to work collaboratively with Yawuru RNTBC and Nyamba Buru Yawuru and the Department of Biodiversity, Conservation and Attractions to manage the Yawuru Conservation Estate. The Shire holds joint management obligations over Minyirr Buru and Guniyan Binba Conservation Parks. The Shire endorsed the Minyirr Buru Management Plan in 2018 while the Guniyan Binba Management Plan was endorsed in 2020. The Shire meets regularly with officers from both organisations at Yawuru Park Council Working Group meetings and decisions are made quarterly at Yawuru Park Council meetings.	Ongoing
Operational: Use fencing and signage to deter people from accessing sensitive and hazardous areas.	<p>Hazardous areas monitored by Environmental Health team and measures put in place where risks identified.</p> <p>The Yawuru Park Council (YPC) and Yawuru Park Council Working Group (YPCWG) have restricted access to culturally sensitive areas (i.e. Hidden Valley, Kunin).</p>	Ongoing

Objective: Land resources are collaboratively managed to sustain their cultural, social, environmental and economic values.		
Strategies: <ol style="list-style-type: none"> 1. Incorporate natural resource management and environmental considerations into the Shire's planning processes. 2. Achieve improvements in locations where Shire-managed land has been degraded. 3. Build and maintain relationships and partnerships with traditional owners and other land managers to deliver improved environmental outcomes. 		
Response: Strategic/Operational	Comment	Status
	<p>Environmental Health team continues monitoring of mosquitos on a complaint/notification basis and to ensure land is not harbouring mosquito borne diseases.</p> <p>Fencing has been installed around Lot 604 Clementson Street and part of Reserve 42502 (BRAC) due contamination reports.</p>	
Strategic: Lobby for and support data acquisition and mapping to support bushfire prevention and management.	DPLH performed detailed review of Dampier Peninsula. Bushfire Framework Review 2019 update a cross-agency Bushfire Framework Review Working Group has joined forces with the CSIRO to develop a new statewide Map of Bushfire Prone Areas, based on scientific modelling.	Unclear
Operational: Develop bushfire management plans for Shire managed reserves in accordance with State Planning Policy 3.7	The Department of Fire and Emergency Services has funded the development of Bushfire Risk Management Plans for each of the Kimberley local governments, including the Shire of Broome. The Bushfire Risk Management Plan is currently under development.	Not implemented
Strategic: Support and encourage Ranger services on Aboriginal lands in their management of traditional burning methods.	The Shire's Ranger team was an active participant for the Dampier Peninsula Fire Working Group which brought together major stakeholders including KLC, DFES, DBCA, Aboriginal rangers and communities, miners and pastoralists. Working group was coordinated by Rangelands NRM. Rangers work collaboratively with DBCA/Yawuru Rangers to manage townsites reserves, including the Yawuru Conservation Estate.	Partially implemented

11.2 Biodiversity

Total Actions Reviewed: 12

Implemented or Ongoing: 8

Not Fully Implemented or Unclear: 4



Some actions are still in progress or lacked clarity in the 2025 update, possibly due to resource constraints, re-prioritisation, or shifts in department responsibilities.

Objective: Bushland, open spaces and biodiversity are protected and enhanced for future generations.		
Strategies: 1. Protect, maintain and/or enhance the quality of vegetation and habitat on Shire owned or managed land. 2. Minimise threats to biodiversity from pests, weeds and feral animals on Shire owned or managed land. 3. Encourage residents, developers and other land managers to protect and maintain biodiversity.		
Response Strategic/Operational	Comment	Status
Operational: Continue to provide recommendations and advice to DPAW on native vegetation clearing applications.	When referred to the Shire by the relevant State Government department, the Shire continues to assess native title clearing applications and providing comments, with consideration given to the Shire’s informing strategies and Local Planning Scheme No. 7 and Local Planning Strategy.	Ongoing
Strategic: Incorporate biodiversity objectives into Shire planning, and acknowledge the worth of the natural environment to tourism is balance against the cost of managing biodiversity and making conservation areas accessible.	Planning control areas were included into Local Planning Scheme No. 6 to identify areas of Landscape Protection (which included monsoon vine thicket locations and Ramsar Sites), floor prone and areas at risk of coastal processes. LPS7 has maintained inclusion of special control areas to identify landscape protection (including monsoon vine thickets and Ramsar sites), floor prone areas and areas at risk of coastal processes.	Implemented

Objective: Bushland, open spaces and biodiversity are protected and enhanced for future generations.		
Strategies:		
<ol style="list-style-type: none"> 1. Protect, maintain and/or enhance the quality of vegetation and habitat on Shire owned or managed land. 2. Minimise threats to biodiversity from pests, weeds and feral animals on Shire owned or managed land. 3. Encourage residents, developers and other land managers to protect and maintain biodiversity. 		
Response Strategic/Operational	Comment	Status
	Precinct Structure Plan development in Cable Beach and Chinatown/Old Broome was informed by an Environmental Assessment Report and provisions relative to environmental considerations for the discrete precincts have been incorporated into the PSPS to guide future development.	
Operational: Continue to close Cable Beach during the wet season at night and high tide to protect turtle breeding sites.	<p>Closure of beach continues during the wet season.</p> <p>Council resolution was passed in 2022 to continue with part closure of the vehicle access ramp between 1 October to 30 November and from 1 December to end of February to minimise disturbance at turtle nesting breeding sites.</p> <p>Another Council resolution was passed in July 2024 which supported the extension of the closure of the beach to vehicles for the whole of February to protect turtle hatchlings.</p>	Implemented
Operational: Continue and expand the propagation and use of native plants in the Shire's landscaping activities.	The Shire's parks and gardens team plant native species of plants at Shire reserves and property, utilising the Shire's nursery to facilitate this ongoing operational activity.	Ongoing
Strategic: In conjunctions with other relevant stakeholders, develop a comprehensive, Shire-wide, multistakeholder Biodiversity Management Plan to guide bushland management and rehabilitation activities, provide mapping of biodiversity areas and corridors, and enhance biodiversity outcomes in urban areas.	Not implemented	Not implemented

Objective: Bushland, open spaces and biodiversity are protected and enhanced for future generations.		
Strategies: <ol style="list-style-type: none"> 1. Protect, maintain and/or enhance the quality of vegetation and habitat on Shire owned or managed land. 2. Minimise threats to biodiversity from pests, weeds and feral animals on Shire owned or managed land. 3. Encourage residents, developers and other land managers to protect and maintain biodiversity. 		
Response Strategic/Operational	Comment	Status
Operational: Continue to encourage residents to establish native gardens, including offering free native plants to residents at community events.	The Shire's nursery collects native seeds and grows native plants. These plants are also provided to community groups and the public for use in projects, as street trees or at private property	Ongoing
Strategic: Advocate for State and Federal Governments to undertake research and identification of flora and fauna in the region, including threatened ecological communities.	A 2024 review of the joint management agreement between DBCA and Yawuru over the Yawuru Conservation Estate found that research and monitoring of flora and fauna has been hampered by resourcing constraints. The Shire is working with Yawuru and DBCA to advocate for more funding to be allocated to support rangers in undertaking these activities over throughout the Yawuru Conservation Estate.	Unclear
Strategic: Develop management plans for reserves controlled by the Shire which provide for management and restoration of conservation areas, and support the preparation of multi-stakeholder management plans for all reserves throughout the Shire which provide for management and restoration of conservation areas.	The Shire has endorsed the development of two management plans for the Yawuru Conservation Estate. The Shire is a joint manager for both Minyirr Buru and Guniyan Binba and management plans were endorsed for each of these parks in 2018 and 2020, respectively.	Partially implemented
Strategic: Develop a comprehensive and multi-stakeholder Weed Management Strategy to guide the Shire's weed management activities on land under its care and control.	<p>A Weed Management Strategy was endorsed by Council in 2022. Due to resourcing constraints, an action plan was not developed immediately after. A review of the Weed Management Strategy was undertaken in 2025 with the intention to include an Action Plan to support its implementation.</p> <p>The Weed Management Strategy and Action Plan is anticipated to be endorsed by Council in November 2025.</p>	Partially Implemented
Operational: Review the Shire's project management plan template for engineering works to include	Weed management is considered when implementing capital projects. The Shire released a Weeds of Broome information brochure to educate and raise awareness of invasive weed species impacting Broome.	Ongoing

Objective: Bushland, open spaces and biodiversity are protected and enhanced for future generations.		
Strategies: <ol style="list-style-type: none"> 1. Protect, maintain and/or enhance the quality of vegetation and habitat on Shire owned or managed land. 2. Minimise threats to biodiversity from pests, weeds and feral animals on Shire owned or managed land. 3. Encourage residents, developers and other land managers to protect and maintain biodiversity. 		
Response Strategic/Operational	Comment	Status
consideration of weed management when undertaking specific projects.		
Operational: Ensure that areas cleared of native vegetation are managed and mulched to prevent soil erosion and the establishment of weeds.	The Shire's Parks and Gardens team implements these practices on an ongoing bases throughout all work undertaking. It also forms part of the approval process for vegetation clearing permits.	Ongoing
Strategic: Progress the draft Public Open Space Asset Management Plan.	The Shire has developed an Asset Management Plan which was endorsed by Council in October 2024 and which includes public open spaces under the Shire's care, control and management.	Implemented

11.3 Water

Total Actions Reviewed: 19

Implemented or Ongoing: 14

Not Fully Implemented or Unclear: 5

Some actions are still in progress or lacked clarity in the 2025 update, possibly due to resource constraints, re-prioritisation, or shifts in department responsibilities.

Objective: Water resources are sustainably managed so that their values are protected into the future.		
Strategies:		
1. Effectively manage drainage assets to minimise impacts on natural areas, like Roebuck Bay. 2. Improve the Shire’s understanding of water resources including water quality issues and their impact on natural areas. 3. Ensure the Shire minimises its water use through efficiency and conservation measures and the use of alternative water sources where possible.		
Response: Strategic/Operational	Comment	Status
Strategic: Review irrigation requirements for Broome’s active sports grounds and recreational parks and consider the increased use of hydrozoning and ecozoning (i.e., removing surplus irrigated areas and replacing them with local plans).	Hydro zoning and eco zoning programme implemented to remove surplus irrigated areas. A new weather station has been installed for water budgeting, ongoing software updates for more efficient irrigation applications. Wetta soil programme implemented on all reserves with excellent results and reduced water usage by combating hydrophobic soils.	Ongoing
Operational: Review water consumption for Shire buildings and assets and determine, where possible,	Water usage is monitored on an ongoing bases and where the opportunity arises infrastructure is upgraded to improve efficiencies. Monitoring is ongoing for lawn reduction opportunities.	Ongoing

Objective: Water resources are sustainably managed so that their values are protected into the future.

Strategies:

1. Effectively manage drainage assets to minimise impacts on natural areas, like Roebuck Bay.
2. Improve the Shire's understanding of water resources including water quality issues and their impact on natural areas.
3. Ensure the Shire minimises its water use through efficiency and conservation measures and the use of alternative water sources where possible.

Response: Strategic/Operational	Comment	Status
leakage and opportunities for improved water use efficiencies.		
Strategic: Balance irrigation demand with sports ground usage and surface wear.	The Broome Recreation and Aquatic Centre (BRAC) upgrade included the installation of a backwash treatment system that enabled the water to then be utilised to reticulate the BRAC lawn area. Each backwash is approximately 10,000 – 15,000 litres and occurs once every one-two weeks. This amounts for a large amount of water to be re-used and diverted from being disposed.	Partially implemented
Operational: Replace or retro-fit appliances and fixtures in Shire facilities with water efficient options as part of asset replacement schedules.	The Shire has installed water sensitive fit for purpose fixtures as part of the building renewal program. Dual flush systems have been installed on several replacement toilets at BRAC facilities. Drink fountains and bathroom taps have been installed to include a timed push button turn on to ensure that taps can't be left on for long periods.	Implemented
Strategic: Advocate to State Government to improve drinking water quality and water source protection in Aboriginal communities.	The Shire meets frequently with Department of Communities and advocates for a range of issues to be addressed, including water quality in Aboriginal communities.	Ongoing
Operational: Implement and retrofit low water use and low maintenance landscape designs as part of landscape renewal schemes.	New planting designs have accounted for maintenance and water usage requirements. The Shire meets with Aboriginal ranger groups and community groups to show and educate on native plantings and propagations techniques.	Ongoing
Strategic: Undertake a fit-for-purpose water supply study to identify alternative water sources for irrigation of Public Open Space.	Through continual lobbying, the Shire secured a fit-for-purpose water supply following the closure of the Broome South Wastewater Treatment Plan (WWTP). The spaces previously irrigated by effluent re-use water are now watered with non-potable bore water, as opposed to the reticulated water supply (scheme water). This not only delivers a significant operation saving to the Shire, but it is also a fit-for-purpose water supply.	Implemented

Objective: Water resources are sustainably managed so that their values are protected into the future.

Strategies:

1. Effectively manage drainage assets to minimise impacts on natural areas, like Roebuck Bay.
2. Improve the Shire's understanding of water resources including water quality issues and their impact on natural areas.
3. Ensure the Shire minimises its water use through efficiency and conservation measures and the use of alternative water sources where possible.

Response: Strategic/Operational	Comment	Status
Operational: Require better management of runoff from building and construction sites via conditions of development approval, with adequate buffers and silt retention systems.	The Shire's subdivisional and development standards include controls that developers of new subdivisions are to implement to reduce runoff from building construction sites and also off the road network to prevent discharge to external environments, particularly Roebuck Bay.	Ongoing
Strategic: Require that all future development and subdivisions incorporate best practice Water Sensitive Urban Designs (WSUD).	All new land releases are assessed against WSUD principles.	Ongoing
Operational: Explore opportunities for retro-fit of WSUD features into older stormwater management systems as part of maintenance and renewal schedules.	An investigation was undertaken to identify possible options/solutions for improving stormwater drainage throughout parts of Old Broome. Water quality improvements are implemented where identified as possible. Opportunities to improve water quality outputs are investigated and implemented through projects (such as the works undertake as part of the Cable Beach foreshore redevelopment).	Ongoing
Strategic: Lobby State water agencies for additional practical guidance around design and sizing of stormwater detention and retention systems better suited for North-West rainfall conditions.	Not undertaken.	Not implemented
Operational: Continue to implement best practice wastewater management and groundwater protection.	The Shire assesses wastewater and groundwater implications through the development application and subdivision processes.	Ongoing
Strategic: Undertake a District Drainage Strategy to assess impacts from localised flooding and areas of high nutrient loading, and identify and cost capital works	No strategy adopted.	Not implemented

Objective: Water resources are sustainably managed so that their values are protected into the future.

Strategies:

1. Effectively manage drainage assets to minimise impacts on natural areas, like Roebuck Bay.
2. Improve the Shire's understanding of water resources including water quality issues and their impact on natural areas.
3. Ensure the Shire minimises its water use through efficiency and conservation measures and the use of alternative water sources where possible.

Response: Strategic/Operational	Comment	Status
and improvements that can be undertake to alleviate drainage quantity and quality issues.		
Operational: Continue to use and explore opportunities for using recycled wastewater on POS and other irrigated landscapes.	Closure of Broome South Wastewater Treatment Plan meant access to recycled grey wastewater for irrigation purposes was lost. Discussions with Water Corporation never resulted in an outcome for recycled grey wastewater to be supplied however, it did result in a fit for purpose non-potable bore water supply being secured for greenspaces.	Not implemented
Strategic: Recommend to the WAPC that developers prepare a mosquito management plan as a condition of subdivision in areas of known mosquito breeding.	Conditions have been incorporated into subdivisions situated in high-risk areas. Conditions are also considered as part of the development application process.	Ongoing
Strategic: Continue to advise State agencies on policy and management responses to prevent groundwater contamination.	Referrals to the Shire from relevant State agencies occur as part of approval processes.	Ongoing
Strategic: Update the extents of 'Aquifer Recharge' Special Control Area in Local Planning Scheme No. 6 based on the outcomes of the Coastal Vulnerability Study.	This was reviewed and incorporated into Local Planning Scheme No. 6. The Special Control Area was also included in Local Planning Scheme No. 7.	Implemented
Strategic: Advocate to State Government to improve wastewater treatment plants in Aboriginal communities.	Where appropriate, the Shire has advocated on behalf of Aboriginal communities for improvements to wastewater treatment plants.	Ongoing
Strategic: Advocate for the connection of old and proposed industrial areas to reticulated sewerage infrastructure.	The Shire has investigated and advocated for connection of industrial areas to sewerage. However, the Water Corporation has confirmed that this is not possible as it would cause the treatment processes at the wastewater treatment plant to fail.	Not implemented

11.4 Coasts

Total Actions Reviewed: 11

Implemented or Ongoing: 10

Not Fully Implemented or Unclear: 1

Some actions are still in progress or lacked clarity in the 2025 update, possibly due to resource constraints, re-prioritisation, or shifts in department responsibilities.

Objective: The values of the coastal region including its associated ecosystems, human uses and ecological processes are understood, appropriately managed and protected.		
Strategies:		
1. Maintain and enhance the coastal environment on Shire owned or managed land in order to retain important social, heritage, environmental and economic values.		
2. Understand and address coastal hazard processes and risks.		
Responses: Strategic/Operational	Update	Status
Strategic: Continue to support the multiple stakeholders and Aboriginal interests through the land use planning framework in determining which coastal locations are acceptable for tourist visitation, the nature of required facilities and programs to enhance tourist experiences and to manage visitor impacts at these locations.	Minyirr Buru and Guniyan Binba Management Plans both endorsed by Council. The Shire has also endorsed, through the Yawuru Park Council, a Recreation Master Plan developed by DBCA for the Yawuru Conservation Estate which seeks to manage key recreational nodes throughout the estate as well as managing visitor safety and impacts.	Ongoing
Operational: Continue operational management of foreshores that are the Shire’s responsibility.	The Shire continues to actively manage foreshore locations under the sole management of the Shire, including Cable Beach and Town Beach reserves. Rangers are frequently present at these locations to ensure these spaces	Ongoing

Objective: The values of the coastal region including its associated ecosystems, human uses and ecological processes are understood, appropriately managed and protected.		
Strategies:		
1. Maintain and enhance the coastal environment on Shire owned or managed land in order to retain important social, heritage, environmental and economic values. 2. Understand and address coastal hazard processes and risks.		
Responses: Strategic/Operational	Update	Status
	are maintained. Rangers also patrol both ends of Cable Beach (Gantheaume Point and North of the Rocks) to ensure safe and proper beach etiquette.	
Strategic: Provide input on the control of access to culturally or environmentally significant areas that are not suitable for tourist access.	<p>Key environmentally and culturally significant areas have been strategically managed through the Shire's endorsement of the Minyirr Buru and Guniyan Binba management plans and the Yawuru Park Council endorsement of the Recreation Master Plan for the Yawuru Conservation Estate.</p> <p>Ongoing management is provided by the Shire through participation in the Yawuru Park Council and Yawuru Park Council Working Group.</p>	Ongoing
Operational: Utilise the outcomes of the Coastal Vulnerability Study to determine the appropriate location and lifespan of new coastal assets.	The Shire has adopted a Coastal Hazards Risk Management and Adaptation Plan (CHRMAP) to guide decision making in relation to areas potentially at risk of coastal processes. The CHRMAP has nationally recognised and is currently under review with an updated version scheduled for publication in 2026/2027FY.	Implemented
Operational: Once the CHRMAP has been completed, undertake staged implementation of the adaptation and mitigation strategies to reduce the risk of coastal hazards in vulnerable areas of the Broome townsite.	<p>Following the CHRMAP, further detailed studies at risk locations have been performed in alignment with the actions in the CHRMAP. Geotechnical investigations have been undertaken by coastal engineers which have informed the design of the Cable Beach foreshore redevelopment. Further geotechnical studies were undertaken in 2020 that examined the underlying geology of the Town Beach foreshore area (including Roebuck Bay Caravan Park) and subsequently informed the assessment of adaptation options.</p> <p>Revetment wall construction was completed to provide protection from erosion of the pindan cliffs adjacent to the Town Beach park area, which includes Pioneer Cemetery.</p>	Implemented

Objective: The values of the coastal region including its associated ecosystems, human uses and ecological processes are understood, appropriately managed and protected.		
Strategies:		
1. Maintain and enhance the coastal environment on Shire owned or managed land in order to retain important social, heritage, environmental and economic values. 2. Understand and address coastal hazard processes and risks.		
Responses: Strategic/Operational	Update	Status
	Shoreline monitoring has been ongoing since the CHRMAP was adopted in 2017.	
Strategic: Continue to support the multiple stakeholders and Aboriginal interests in understanding coastal processes and vulnerabilities across the Shire's coastlines and the requirements for policy development and management actions.	Where requested the Shire supports Aboriginal organisations in developing understanding of coastal processes.	Ongoing
Operational: Continue to monitor and update management planning and operational activities for the in-town reserves in partnership with RNTBC and DPAW as the implications of vulnerability assessments become better understood.	The Shire is an active member of the Yawuru Park Council Working Group and the Yawuru Park Council, where all range of matters impacting the in-town reserves are discussed in detail in collaboration with Yawuru RNTBC and DBCA.	Ongoing
Strategic: Amend the extents of 'Flood Prone Land' control areas in Local Planning Scheme No. 6 and introduce a Special Control Area for erosion risk based on the outcomes of the Coastal Vulnerability Study to provide guidance for how development in these areas is to be assessed.	Coastal Hazard Risk Area Special Control Area was incorporated into the LPS6 through amendment no. 5 which was gazetted on the 9 th of November 2018. This has since carried over to LPS7.	Implemented
Strategic: Continue to monitor and update Coastal Vulnerability Assessments in line with the best available data on climate change impacts, sea level rise and coastal hazards.	Shoreline monitoring is completed annually as part of the CHRMAP. Detailed studies on coastal risk assessment have been performed for at risk locations such as Town Beach and Cable Beach.	Ongoing
Operational: Continue to support the Broome Port Authority in its emergency response planning for Port	Unclear if completed/undertaken.	Not implemented

Objective: The values of the coastal region including its associated ecosystems, human uses and ecological processes are understood, appropriately managed and protected.		
Strategies:		
1. Maintain and enhance the coastal environment on Shire owned or managed land in order to retain important social, heritage, environmental and economic values. 2. Understand and address coastal hazard processes and risks.		
Responses: Strategic/Operational	Update	Status
boundaries extending from Cable Beach to Crab Creek (Mangalagun).		
Strategic: In accordance with State Planning Policy 2.6, undertake a Coastal Hazard Risk Management and Adaptation Plan (CHRMAP) for the Broome townsite.	<p>The Shire adopted the CHRMAP for the Broome townsite on 7 September 2017. The purpose of the CHRMAP is to systematically identify coastal inundation and erosion hazards across the townsite and put in place controls to manage and mitigate the risk in association with the community and stakeholders.</p> <p>The first step of this process was to prepare a Coastal Vulnerability Study (CVS) to understand potential future threats from coastal inundation, erosion, stormwater flooding and climate change. The Broom CVS was received by Council in June 2016 and identified that portions of the Broome townsite are at risk of coastal hazards, namely, inundation and erosion, within a 100-year planning timeframe.</p>	Implemented

11.5 Energy

Total Actions Reviewed: 14

Implemented or Ongoing: 10

Not Fully Implemented or Unclear: 4

Some actions are still in progress or lacked clarity in the 2025 update, possibly due to resource constraints, re-prioritisation, or shifts in department responsibilities.

Objective: Energy Use is optimised through design, conservation, efficiency and the use of renewable energy sources.		
Strategies:		
1. Improve the energy-use efficiency and sustainable design for all Council assets and programs during planning, procurement of new assets and as part of replacement/maintenance schedules for existing assets.		
Reponses: Strategic/Operational	Comment	Status
Strategic: Support subdivision layouts that facilitate energy efficiency and best solar orientation for passive solar outcomes and where necessary, amend or supplement WAPC policy to achieve outcomes suitable or the north west climate conditions.	Provisions have been included into the Structure Plan and Subdivision Standards Local Planning Policy (LPP) to facilitate subdivisional layouts which facilitate energy efficient urban layout. The LPP also includes standards to promote energy efficiency in the public open space network.	Ongoing
Operational: Prepare and promote energy efficiency through the local planning framework through best practice design of parks and streetscapes, covered or	The Shire has supplied this material to the WAPC for incorporation into the Liveable Neighbourhoods Review.	Ongoing

Objective: Energy Use is optimised through design, conservation, efficiency and the use of renewable energy sources.		
Strategies:		
1. Improve the energy-use efficiency and sustainable design for all Council assets and programs during planning, procurement of new assets and as part of replacement/maintenance schedules for existing assets.		
Reponses: Strategic/Operational	Comment	Status
shaded footpaths, dual use paths and car parks and energy efficient outdoor lighting.	Landscaping standards have been incorporated into LPS7 to facilitate shading of parking areas. Landscaping controls have been incorporated into the precinct structure plans to encourage retention of urban trees and to increase plantings to reduce urban heat island effect. Energy efficient lighting improvements implemented through capital works (e.g., Chinatown and Town Beach).	
Operational: Prepare and adopt a local planning policy for regional variations to the Residential Design Codes to incorporate energy efficiency and solar passive design provisions appropriate for the North-West climate, such as shaded outdoor living areas and breezeways.	Adoption of this local planning policy was investigated. However, it did not proceed to finalisation as energy efficient and solar passive designed were addressed under the National Construction Standards and is beyond the scope of the planning assessment process to address.	Not implemented
Strategic: Ensure good connectivity and accessibility for walking and cycling in new developments.	As part of the structure plan assessment process, developers are required to show potential future public transport networks. The Shire has continued to implement improvements in the footpath network to enable other modes of transport and reduce dependency on cars. The Shire continues to fund footpath upgrades as well as maintain existing paths.	Ongoing
Operational: Continue to improve the Shire's shared path network where possible.	The Recreational Trails Masterplan has identified specific tracks and trails to enable better connectivity between key nodes and destinations within Broome. While there has been limited implementation to this point, several trails and options for signage and direction have been included in the Shire's Long Term Financial Plan and Corporate Business Plans.	Ongoing
Strategic: Require BCA 6-star compliance for all Shire building approvals, ensuring a continuing progression	Energy efficiency assessment reviewed with building applications. It is a statutory requirement for Class 1 dwellings. Building Codes Australia 2022 increases to 7 stars in 2025. The Shire's climate zone will require 6.5 and 6-star minimums by 2025. Current average is 6+ stars; above 2024 minimum of 5.5 or 5 stars.	Ongoing

Objective: Energy Use is optimised through design, conservation, efficiency and the use of renewable energy sources.		
Strategies:		
1. Improve the energy-use efficiency and sustainable design for all Council assets and programs during planning, procurement of new assets and as part of replacement/maintenance schedules for existing assets.		
Reponses: Strategic/Operational	Comment	Status
toward energy efficient built form for greenfield and brownfield developments.		
Operational: Support Horizon Power's philosophy of energy efficiency by linking to and promoting their web based promotional material.	Support provided where appropriate.	Unclear
Strategic: Provide 'in-principle' support for remote area Aboriginal communities in their progress toward energy efficiency and self-supply.	The Shire has supported the normalisation of services for remote Aboriginal communities. Shire officers continue to advocate for sustainable development within Aboriginal communities including solar power stations and offering support for future projects when required.	Ongoing
Strategic: Demonstrate leadership in the area of energy efficient built form.	The Shire continues to assess subdivision applications referred by the WAPC with consideration of the climatic conditions of Broome and energy efficient urban layout. Furthermore, the Shire has made progress with transitioning facilities to renewable energy sources, such as the Broome Recreational Aquatic Facility and the Shire's Civic Centre.	Ongoing
Operational: Direct home owners and occupiers to energy rating and efficiency websites through promotional material, facilitating consumer choice of energy efficient domestic appliances.	Upon review, not considered a Shire responsibility/priority. Horizon Power is already undertaking these activities to an adequate level.	Not implemented
Operational: Continue to explore ways of improving energy-use efficiencies as part of asset replacement / refurbishment schedules.	The Shire has installed new field lighting at Nipper Roe Sports Field (BRAC) which has been designed and costed utilising LED technology. This has reduced the amount of power utilised to light up the playing surface.	Ongoing

Objective: Energy Use is optimised through design, conservation, efficiency and the use of renewable energy sources.		
Strategies:		
1. Improve the energy-use efficiency and sustainable design for all Council assets and programs during planning, procurement of new assets and as part of replacement/maintenance schedules for existing assets.		
Reponses: Strategic/Operational	Comment	Status
	<p>LED lighting has replaced older style lighting in the indoor BRAC stadium as well as in the BRAC squash courts, reducing energy consumption while improving lux levels. LED lighting was included in the upgrade of the BRAC outdoor courts.</p> <p>Older style lighting has been replaced by energy efficient LED lighting at the following locations: Nipper Roe Sports Field, BRAC tennis courts, BRAC outdoor sports court. All internal and external lighting at BRAC including the indoor stadium, offices, corridors, meeting rooms and squash courts have been upgraded to LED lighting.</p> <p>Timed lighting has been installed at the skate park and pump track. Smart lighting that reduces usage until the sensor has been engaged has been installed along the Conti Foreshore.</p>	
Operational: To continue to provide information on the multiple benefits of reducing car dependency where possible.	Not implemented	Not implemented
Strategic: Continue to include fuel efficiency as an important consideration in the Shire's vehicle and plant procurement policies.	Fuel efficiency is requested and considered when purchasing plant equipment.	Ongoing
Strategic: Whilst public transport is minimal in Broome at present, require developers to consider future public transport routes as part of the design process for structure plans and subdivisions.	As part of the structure plan assessment process, developers are required to show potential future public transport networks.	Ongoing

11.6 Waste

Total Actions Reviewed: 8

Implemented or Ongoing: 7

Not Fully Implemented or Unclear: 1

Some actions are still in progress or lacked clarity in the 2025 update, possibly due to resource constraints, re-prioritisation, or shifts in department responsibilities.

Objective: Waste is managed sustainably to ensure the highest level of economic return from resource recovery.		
Strategies:		
1. Improve the Shire’s waste management facilities and practices including community participation in waste collection and recycling activities.		
Responses: Strategic/Operational	Comment	Status
Strategic: Continue the process of design and location for a suitable Resource Recovery Facility to Meet Broome’s household and other solid waste needs into the future.	RRRP has finalised a site and construction is underway, subject to further funding being secured.	Implemented
Strategic: Maintain the current high levels of surveillance and forensic assessment of dumped rubbish.	The Buckleys Land Fill is managed in accordance with its DWER licence, including annual monitoring and reporting. Annual environmental and audit compliance reports continue to be submitted to DWER in accordance with licence requirements.	Ongoing

Objective: Waste is managed sustainably to ensure the highest level of economic return from resource recovery.		
Strategies:		
1. Improve the Shire's waste management facilities and practices including community participation in waste collection and recycling activities.		
Responses: Strategic/Operational	Comment	Status
Operational: Review and implement closure plans for the existing landfill site which is nearing its effective working life.	Quarterly volumetric surveys are undertaken to track void space utilisation against the Buckley Landfill Closure Plan. Surveys indicate an improvement in compaction rates and diversion of waste from landfill.	Ongoing
Strategic: Pursue enforcement action as appropriate if people dump rubbish illegally.	Operations staff continue to manage illegal dumping when it occurs.	Ongoing
Operational: Improve the effectiveness of kerb-side co-mingled recycling service.	<p>Education programs and tours of waste management facility are being run with limited primary/secondary school update.</p> <p>Senior/pensioner skip bin services offered on an annual basis. A dedicated e-waste drop off area will be constructed at the WMF late 2023.</p> <p>A dedicated e-waste drop-off area constructed in 2023. Cover your load signs installed in 2023 on main routes to landfill.</p>	Ongoing
Strategic: Continue to explore strategic opportunities for community engagement through initiatives such as: the 'Keep Broome Clean Team' on Facebook and other media.	Educational awareness programs run with youth and regional communities to teach people about recycling and re-use opportunities and practices to reduce waste.	Ongoing
Operational: Continue to operate the orange bag rubbish collection system where individuals can register with the Shire and be paid for rubbish they collect.	Orange bag collection campaign is no longer a paid opportunity for the community. Bags can still be obtained through the depot. However, the Shire cannot run the service due to a lack of understanding of WHS and insurance implications.	Not implemented

Objective: Waste is managed sustainably to ensure the highest level of economic return from resource recovery.		
Strategies:		
1. Improve the Shire's waste management facilities and practices including community participation in waste collection and recycling activities.		
Responses: Strategic/Operational	Comment	Status
Operational: Continue to support community groups such as Keep Broome Clean Team	<p>The Shire has run annual 'clean up' day promotions and other recycling initiatives such as garage sale trail and keep Australia beautiful activities. The Council supports clean-up activities by other organisations through free waste disposal.</p> <p>Council continues to offer free pre-cyclone tipping weekends, senior/pensioner free skip bins, and runs annual 'clean up' days and supports community initiatives with free waste collection or provision of a skip bin when requested.</p>	Ongoing



11.7 Glossary & Acronyms

- **Adaptive Management** – A method of adjusting policies and actions based on observed outcomes.
- **BCA** – Building Code of Australia: sets minimum energy efficiency standards for new dwellings.
- **CHRMAP** – Coastal Hazard Risk Management and Adaptation Plan: framework for managing coastal erosion and inundation risks.
- **Coastal Erosion** – The gradual loss of shoreline due to wind, waves, and sea-level rise.
- **Community Recycling Centre (CRC)** – A site where residents can drop off recyclables and problem waste.
- **C&D Waste** – Construction and Demolition Waste: materials from building, renovating or demolishing structures.
- **DBCA** – Department of Biodiversity, Conservation and Attractions: manages WA's conservation estate.
- **DPLH** – Department of Planning, Lands and Heritage: oversees planning policy, land tenure and Aboriginal heritage.
- **EMP** – Environmental Management Plan: outlines actions and responsibilities to achieve environmental outcomes.
- **EPBC Act** – Environment Protection and Biodiversity Conservation Act (Cth): federal legislation for environmental protection.
- **FOGO** – Food Organics and Garden Organics: kerbside collection service for compostable waste.
- **GPT** – Gross Pollutant Trap: device that filters litter and debris from stormwater runoff.
- **LiDAR** – Light Detection and Ranging: remote sensing method using laser to map terrain.
- **LPS7** – Local Planning Scheme No. 7: statutory instrument guiding land use planning in the Shire of Broome.
- **RNTBC** – Registered Native Title Body Corporate: the recognised entity managing native title interests.
- **RRRP** – Regional Resource Recovery Park: Broome's planned waste processing and disposal facility.
- **STR** – Significant Tree Register: identifies and protects trees of cultural or ecological value.
- **Telemetry Metering** – Remote monitoring system for real-time water or energy use.
- **TEK** – Traditional Ecological Knowledge: long-standing knowledge of ecosystems held by Traditional Owners.
- **WSUD** – Water Sensitive Urban Design: planning and engineering practices that manage stormwater sustainably.
- **Yawuru IPA** – Yawuru Indigenous Protected Area: co-managed conservation area near Broome.