



Bass Coast Shire Council

Open Space Asset Management Plan

2018 – 2022



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1. EXECUTIVE SUMMARY

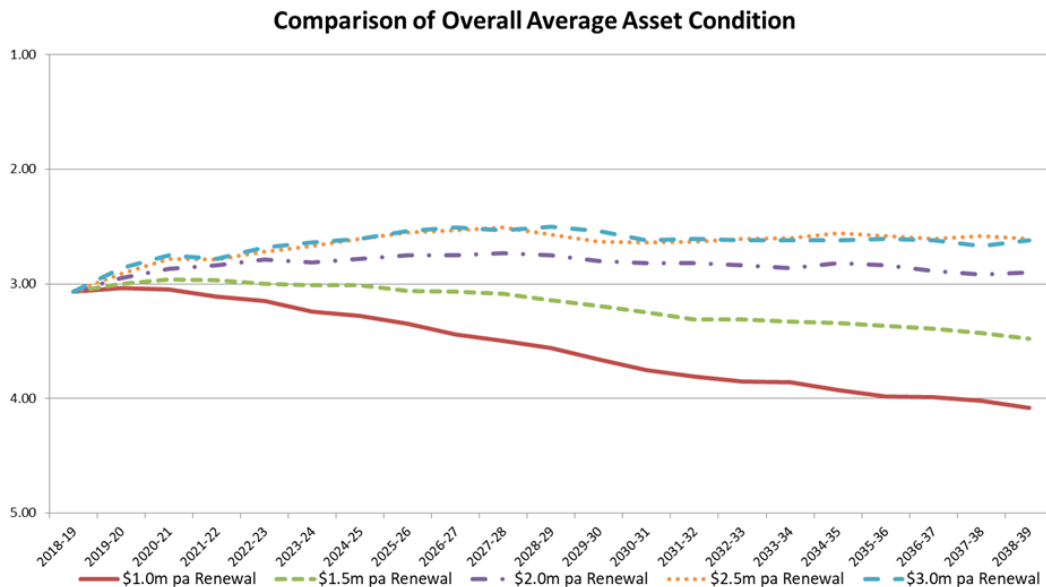
The objective of infrastructure asset management is to ensure that assets provide their required levels of services in the most cost effective manner to cater for both present and future customers¹. This Asset Management plan focuses on the management of the Bass Coast Shire’s open space assets.

Open space asset include; Artworks, Bridges, Fences, Irrigation, Marine Structures, Open Space Furniture, Park Active Areas, Park Equipment, Park Infrastructure, Parks and Gardens, Retaining Walls and Signs in open space areas.

Council’s open space assets contribute to the delivery of the seven key strategic objectives set out in the Council Plan 2017-2021 through:

- Contributing to the character of the region and thus the liveability for residents
- Providing active and passive recreation spaces thus contributing to the health and wellbeing of the community
- Preserving the natural environment and foreshores
- Attracting visitors to the region and thus providing economic benefits directly and indirectly to the community as whole

The total current replacement cost of the Shire’s open space assets is just over \$44 million. As shown in the Comparison of Overall Average Asset Condition graph below, condition-based forecasting reveals that the short-term annual capital renewal target should be \$2.0 million per annum for the life of this Asset Management Plan.



This target of \$2.0 million aligns with the planned expenditure on open space asset renewal in the 2018-19 financial year. This is an increase over the originally planned level and is being funded

¹ *International Infrastructure Management Manual*, Institute of Public Works Engineering Australia

through the diversion of funding from the buildings renewal program. This is a service based decision which shows that the diversion of funding will give a better overall level of service to the community across both the buildings and open space asset portfolios.

FREQUENTLY ASKED QUESTIONS

WHAT IS AN ASSET?

An asset is an item of infrastructure owned or managed by the Council regarded as having value. Council's assets range from buildings to roads, drainage, footpaths, playgrounds, park and street furniture.

WHAT IS AN ASSET MANAGEMENT PLAN?

The purpose of an asset management plan is to help an organisation manage their infrastructure and other assets to an agreed standard of service. The plan outlines what needs to be invested in each of our asset classes in order to meet these defined service standards over the next ten years.

This asset management plan is prepared as a core asset management plan in accordance with the International Infrastructure Management Manual². It is prepared to meet legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting.

WHAT ARE THE OBJECTIVES OF ASSET MANAGEMENT?

The basic premise of infrastructure asset management is to intervene at strategic points in an asset's life cycle to extend the expected service life, and thereby maintain its performance. Generally speaking, the cost of maintaining an asset decreases with planned maintenance rather than unplanned maintenance, however, excessive planned maintenance increases costs. An objective of asset management is to strategically time infrastructure renewals before unplanned maintenance costs become excessive, but not so soon that assets are renewed before it is really needed.

Council's goal in managing infrastructure assets is to meet the required levels of service in the most cost effective manner for present and future customers. The key elements of asset management are³:

- Taking a life cycle approach.
- Developing cost-effective management strategies for the long term.
- Providing a defined level of service and monitoring performance.
- Understanding and meeting the demands of growth through demand management and infrastructure investment.
- Managing risks associated with asset failures.
- Sustainable use of physical resources, and
- Continuous improvement in asset management practices.

² *International Infrastructure Management Manual*, Institute of Public Works Engineering Australia

³ *International Infrastructure Management Manual*, Institute of Public Works Engineering Australia

HOW DO WE DETERMINE WHEN RENEWALS ARE REQUIRED?

Renewals are determined by considering the ability of an asset to meet an agreed standard of service. This is done by regularly reviewing the condition of assets and using this information as a basis to prioritise renewals.

HOW DO WE DETERMINE OUR LEVELS OF SERVICE?

Our levels of service have been developed based on legislative requirements, customer research and expectations, and strategic goals.

HOW DOES COUNCIL INCLUDE COMMUNITY FEEDBACK INTO THE PLAN?

Council includes community feedback into Asset Management Plans in a number of ways:

- Through information provided via our annual community survey.
- Through review of common customer requests and complaints in our Customer Request Management (CRM) system, and
- Through a broader service based planning process which will consider asset provision and management in support of all Council services. Community engagement from the current open space and recreation planning through *Active Bass Coast* will provide community feedback to inform service levels to incorporate in future Open Space Asset Management Plans.

2. INTRODUCTION

2.1 PURPOSE OF THIS ASSET MANAGEMENT PLAN

The fundamental purpose of this Open Space Asset Management Plan (OSAMP) is to improve Council's long-term strategic management of its open space assets. Outcomes are to be achieved in accordance with Council's key strategic documents in order to cater for the community's desired levels of service in the future. The OSAMP demonstrates reasonable management in the context of Council's available financial and human resources.

The OSAMP achieves this by setting standards, service levels and programmes which Council will develop and deliver. The standards and service levels have been set in accordance with user needs, regulations, industry practice and legislative codes of practice.

The asset management plan is to be read with the following associated planning documents:

- Bass Coast Shire Council *Asset Management Policy – Infrastructure Assets 2017-2021*.
- Bass Coast Shire Council *Asset Management Strategy for Infrastructure Assets 2017-2021*.
- Bass Coast Shire Council *Shaping a Better Bass Coast – Council Plan 2017-2021*.

2.2 SCOPE OF THIS ASSET MANAGEMENT PLAN

Council's open space assets have a Total Replacement Value of \$44.26 million (as at 1 July 2017). The physical quantities of the different types of assets that Council is responsible for is shown in Table 1 below.

Table 1 – Quantities and Replacement Values of Council Open Space assets as at 1 July 2017

Asset Category	Number of Assets ⁴	Replacement Value
Artworks	124	\$3,755,800
Bridges	51	\$2,682,051
Fences	3129	\$8,948,580
Irrigation	932	\$2,318,660
Marine Structures	26	\$2,146,281
Open Space Furniture	1557	\$5,011,061
Park Active Areas	49	\$3,229,834
Park Equipment	507	\$3,404,226
Park Infrastructure	18	\$1,080,150
Parks & Gardens	3	\$32,078
Retaining Walls	248	\$11,321,905
Signs	1495	\$322,254
Grand Total	8139	\$44,252,880

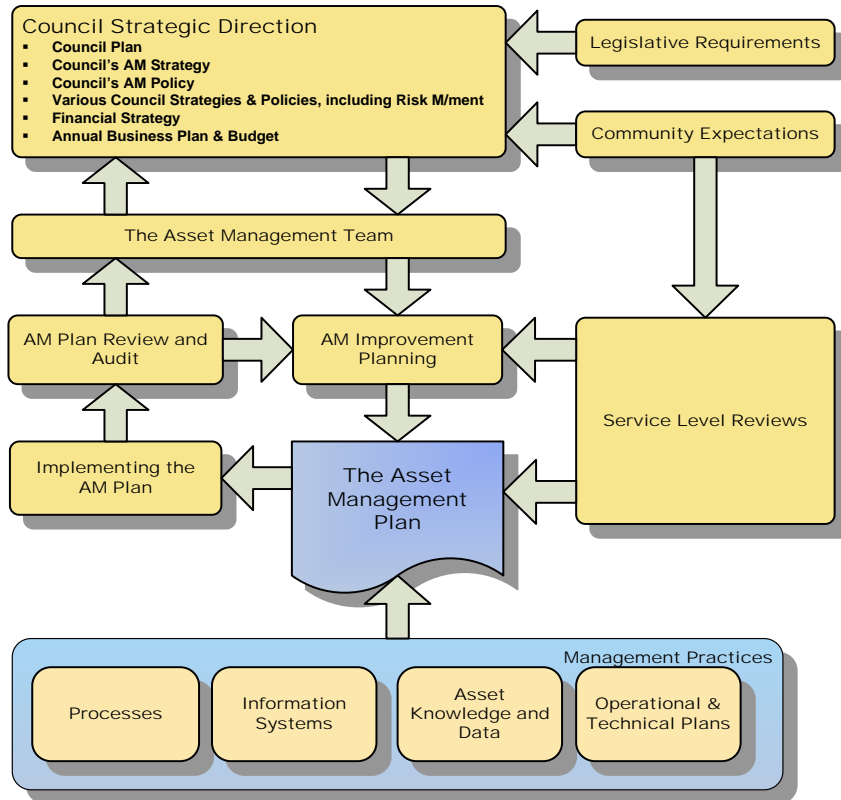
⁴ For the purpose of determining the number of assets, low value assets of similar nature have been grouped (sign, water tap, waste bin, bollards and park tables and seats) for financial reporting but have been individually counted for asset management. A valuation recognition threshold has not been applied for individual assets and the total of \$44,252,881 contains \$4,097,287 of individual assets below the capitalisation recognition threshold of \$5,000. These items will not be valued for financial reporting purposes.

2.3 LINKAGES TO CORPORATE STRATEGIES

Figure 1 outlines the linkages between Council’s strategic planning processes and the process for the development of Asset Management Plans.

Asset Management Plans provide guidance to the Council Plan and to the Strategic Resource Plan. These long-term plans set the short-term funding levels available which, in turn, refine the Asset Management Plans and provides input to the Annual Budget. From this the Capital Works Program for renewals is developed.

Figure 1 – Linkages between the Asset Management Plan and key strategic documents and activities



Council’s role is to locally govern for all residents, visitors and ratepayers, and provide a range of programs and services that meet the needs of our community. This role is succinctly encapsulated through the Council’s Vision:

Bass Coast will be known as a region that supports a sustainable and healthy community, and values and protects its natural assets.

The Council Plan 2017-2021 has been developed with the aim of fulfilling Council's Vision. It sets out a four-year action plan which covers seven key strategic objectives:

- Advocacy
- Economic Development
- Environment
- Governance
- Health and Wellbeing
- Liveability
- Our Character

Council's open space assets are a fundamental base for the delivery of several these key objectives through:

- Contributing to the character of the region and thus the liveability for residents
- Providing active and passive recreation spaces thus contributing to the health and wellbeing of the community
- Preserving the natural environment and foreshores
- Attracting visitors to the region and thus providing economic benefits directly and indirectly to the community as whole

This Asset Management Plan provides a platform for the efficient and effective maintenance and renewal of open space assets so that they will continue underpin the delivery of Council's Strategic Outcomes and Vision.

2.4 LEGISLATIVE REQUIREMENTS

This Asset Management Plan is governed by a range of legislative and statutory requirements including:

- Local Government Act 1989
- Emergency Management Act 1986
- Emergency Management Act 2013
- Planning and Environment Act 1987
- Building Act 1993
- Environment Protection Act 1970
- Bass Coast Shire Council Planning Scheme
- Municipal Strategic Statement

2.5 COMMUNITY EXPECTATIONS AND CONSULTATION

Council participates in the annual state wide Local Government Community Satisfaction Survey coordinated by Local Government Victoria. This standardised survey focuses on matters seen by the state government as key to assessing the overall performance of Council and does not delve into matters closely related to the provision and management of open space assets. Generally for open space assets, knowledge of community expectations has been based on feedback via the elected representatives, requests and complaints from community groups and residents, and direct contact with council staff. Historically this has provided an adequate degree of direction for Council's day-to-day management of its open space assets.

In addition to the preparation of the Open Space Asset Management Plan, Council is currently developing *Active Bass Coast*, its Recreation and Open Space Plan. This latter document will provide a 10-year strategic framework for the provision of open space and recreation services to the community. A key focus for *Active Bass Coast* over the first 6 months of 2018 is a structured community consultation. The findings of this consultation process will provide key inputs to a review of the Levels of Service for open space.

3. ASSET CRITICALITY AND LEVELS OF SERVICE

3.1 CRITICALITY

A challenge that all Councils face is balancing a broad range community expectations for recreation opportunities with community affordability. Delivering this balance requires Council to establish differential service standards for each location based on its relative significance to the community.

In line with good practice asset management and affordable service delivery, this is formally achieved by establishing a criticality ranking for each, park, reserve and open space area within the Shire where the ranking takes into account factors such as purpose of the space, level of usage and significance to the community. The criticality ranking is then used within the defined Levels of Service to guide decisions in matters such as facility provision within a park or reserve, appearance of the space, maintenance standards and response times to defects and other community requests.

Council's current open space maintenance practices are based on the provisions recorded in *In-house Agreement No: CA97002 – Provision of Parks and Amenity Maintenance Services*. That document uses a four-level ranking system as shown in Table 2 below. The level is chosen for each location is based on the importance of the particular location to the community and then the selected criticality ranking is then applied to all open space assets at that location.

Table 2 – Criticality Rankings applied to Open Space locations

Criticality	Description
A	Presentation Standard – premium locations that attract significant numbers of visitors to the Shire and influence the perception of the community and the region.
B	High Standard – locations that attract significant number of visitors from within the Shire and influence the perception of the community.
C	Medium Standard – locations that are significant to localised communities and townships.
D	Low Standard – low use locations generally only used by the immediate residents.

As discussed in the next sub-section, Council needs to review and update its Levels of Service. Criticality systems exist to support Levels of Service and thus it is implied that a review of service levels will necessitate of review of the criticality system that Council is using.

Increasingly, Councils are finding that a single criticality ranking is problematic for open space assets in that the asset provision priorities and maintenance standards may not always align e.g. a Local park in the centre of a small township may require more intensive maintenance than a Regional park due to the level of use and visual prominence. The solution is to assign two different criticalities to each location:

- **Maintenance Level** – sets the maintenance standards and intervals taking account of intensity of use, community importance and types of assets.
- **Facilities Category** – sets the type and quantity of facilities such as barbecues, playgrounds, seating, toilets, etc. that is provided within each park and reserve.

When reviewing the criticality ranking system, consideration should be given to adopting an approach which includes a maintenance level measure and a facilities category to consider as a dual system.

Improvement Action 1: Review the current criticality/hierarchy ranking system used for open space assets and revise as necessary.

3.2 LEVELS OF SERVICE

The 'level of service' is the defined service quality for a particular activity or service area against which service performance can be measured. They provide the basis for the life-cycle management strategies and works programme identified within the Asset Management Plan. While not formally codified as Levels of Service, Council draws its maintenance practices and standards from *In-house Agreement No: CA97002 – Provision of Parks and Amenity Maintenance Services*.

"Good practice" asset management is described as *a journey, not a destination*. Levels of Service should not be viewed as static as community expectations and priorities change over time. Through the preparation of this plan it has been identified that it is timely to review Council's accepted Levels of Service and document them in a separate Business Process Manual in a format consistent with current good practice.

As detailed in the Asset Improvement Plan in Section 7, the key steps are:

- reviewing the documented maintenance practices and updating the performance standards as necessary to reflect current work practices
- expanding the range of maintenance practices to incorporate the full range of activities that constitutes the inspection and maintenance of open space assets
- identifying key measures to use as Community Levels of Service
- formalising the current asset provision and renewal decision parameters as appropriate Levels of Service
- developing a process to determine the funding required to deliver the agreed Levels of Service
- establishing a process to undertake an annual funding review to ensure the funding levels are adjusted to cater for growth in the asset portfolio

Improvement Action 2: Create an initial set of Operational Levels of Service through
(a) reviewing the maintenance practices taken from In-house Agreement No: CA97002 – Provision of Parks and Amenity Maintenance Services and
(b) updating the performance standards as necessary to reflect current work practices.

Improvement Action 3: Complete the preparation of the Operational Levels of Service by incorporating the full range of inspection and maintenance activities applicable to the management of open space assets.

Improvement Action 4: Define the Community Levels of Service to be used to assess Council's open space asset management performance as assessed from a community perspective.

*Improvement Action 5: Document the agreed **Community Levels of Service and Operational Levels of Service** into a **Business Process Manual**.*

*Improvement Action 7: Combine the open space asset provision and renewal standards set out in various Council strategies and plans into a single set of **Asset Provision and Renewal Levels of Service** and document in the **Business Process Manual**.*

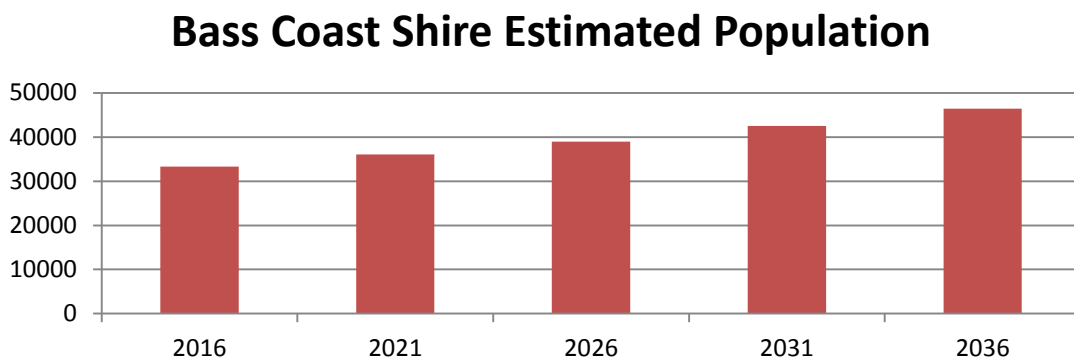
4. FUTURE DEMAND

4.1 DEMAND FORECAST

Council's fundamental role is to provide services to the community and its infrastructure assets are a means to support this. Consequently, future demand for these assets is tied to the demand for Council's services. At its simplest, demand is tied to population growth.

The population of the Bass Coast Shire Council region was estimated to be 33,311 people in June 2016, up from 26,941 people in June 2006. This change represents an annual growth of 2.4%. As shown Figure 2 below, the population is forecast to grow to 46,429 by June 2036 which is an annual growth of 1.9%. While the population of the region will continue to grow, the rate of growth will be slower than the past decade. As a consequence of this population growth, there will continue to be an increasing demand for active and passive recreational open spaces.

Figure 2 – Estimated Population of the Bass Coast Shire



4.2 CHANGES IN SERVICE EXPECTATIONS AND TECHNOLOGIES

Considering population growth alone can be misleading and also does not account for the visitor population in Bass Coast, account must be taken of the changing demographic profile and service expectations of the community and how these will impact on the types of open spaces required. Currently the dominant '5-year' age group within the Shire is ages 65 to 69. In 2026 this age bracket is still expected to be the dominant age group but there will also be significant growth in the population of the 75 to 79 age group. The open space needs of this sector of the community will be different to those of young adults, families and children.

Now in development, *Active Bass Coast* will set the framework for the provision of open space and recreation services over the coming decade. Once complete it will guide a detailed investigation into the impact that changes in services expectations and new technologies will have on the management of open space assets. This flow-on investigation has been included in the Asset Improvement Plan.

4.3 CLIMATE CHANGE

Planning for climate change is required to ensure that the impacts of climate change are minimised as much as possible. This is essential for open space assets which can be impacted by climate change in the following ways:

- Coastal flooding
- Increased frequency and extremes of flooding and droughts
- Increased risks of wildfires
- Increased exposure to sunlight causing materials to degenerate at faster rates

Areas at particular risk are open space assets located on or near foreshores and adjacent to water courses.

A comprehensive Risk Management Plan for open space will be required as an initial step to better understand how Council is currently managing climate change risk and how it is intended to be managed in the future.

Improvement Action 10: Develop a comprehensive Risk Management Plan for provision and management of open space assets.

4.4 DEMAND MANAGEMENT PLAN

Demand for new services will be managed through a combination of retiring inefficient assets, upgrading of existing assets, receiving gifted assets with new land subdivisions and providing new assets when required. Demand management practices also include provision of non-asset solutions, insuring against risks and managing failures. A Demand Management Plan will be developed in a future revision of this OSAMP.

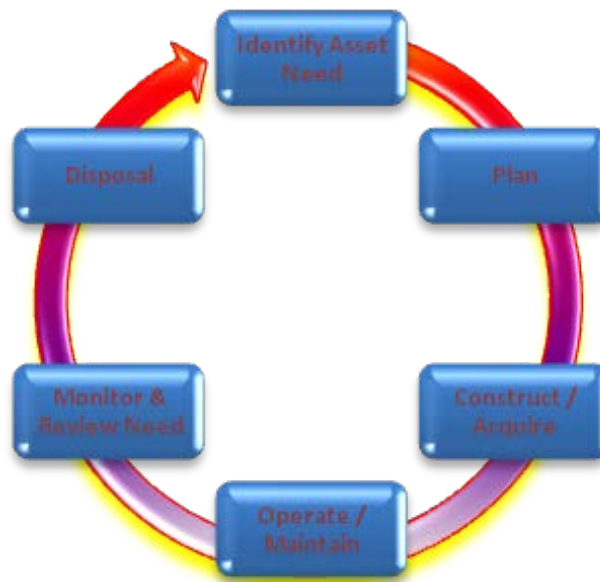
5. LIFE-CYCLE MANAGEMENT PLAN

The life-cycle management plan details how Bass Coast Shire Council plans to manage and operate the open space assets while optimising life-cycle costs.

Life-Cycle Management is recognised by Council as an essential component of this Open Space Asset Management Plan (OSAMP). This section of the OSAMP will provide details of Council's data and processes required to effectively manage, renew and upgrade the infrastructure assets. It also documents the analysis that Council undertakes regularly to predict and monitor expected future expenditures required to effectively manage the asset portfolio.

The practice of life-cycle asset management requires the consideration of all management options and strategies as part of the asset life-cycle from initial planning to ultimate disposal. The objective of managing the assets in this manner is to look at long-term cost impacts (or savings) when making asset management decisions. Figure 3 below provides a graphical representation of the asset lifecycle including each of the stages an asset passes through during its life.

Figure 3 – The Cycle of Asset Management



5.1 ASSET DATA

5.1.1 ASSET STOCK & USEFUL LIVES

The open space asset portfolio comprises a vast array of assets from a small number of very large assets such as tennis courts, boat ramps, jetties and sea walls that have individual values in excess of \$500,000 down to very large number of small items with individual values under \$500 such as bollards, gates, rubbish bins and signs. While from a financial perspective the small items are rolled into single “network assets” such as Bins or Signs to simplify their financial management, the physical management of these items still requires them to be separately identified and tracked. The previous recognition threshold for individual assets was \$10,000 and has been reviewed to a recognition threshold for individual assets of \$5,000.

An independent asset data capture and valuation project was completed in 2017 for the open space assets. This identified 8,139 separate items with a total Replacement Value of \$44,260,465⁵ and an Annual Depreciation of \$1,506,893. For management purposes, the assets have been grouped into one of twelve Asset Categories. The number of items and value of each category is set out in Table 1 on page 4.

Each open space item has a Useful Life which is the time period from when the asset is new to the point where it can no longer serve its intended function and needs to be replaced. The Useful Life varies between different asset types and ranges from 15 to 100 years.

5.1.2 CONDITION ASSESSMENT OF COUNCIL'S OPEN SPACE ASSETS

Condition Assessment is a technical inspection done by a competent assessor to evaluate the physical state of the asset elements and services. In 2017 Council used independent assessors to undertake a complete assessment of all open space assets.

The assessment was completed using an industry-based good practice scoring system where a score of 1 indicates that an asset is in *Very Good* condition and a score of 5 indicates *Very Poor* condition. The full range of condition descriptors is set out in Table 3 below. Note that the system includes an additional score of 6 for any assets that have failed.

Table 3 – Condition Score Descriptors

Score	Condition	Description
1	Very Good	Asset is new or in "as new" condition with no defects or signs of use. Scheduled routine maintenance is required.
2	Good	Asset is in sound condition with occasional defects and minor signs of use. Scheduled routine maintenance is required. Occasional unplanned maintenance is required.
3	Fair	Asset is acceptable condition with obvious signs of use and defects occurring regularly. Scheduled routine maintenance is required. Unplanned maintenance is required.
4	Poor	Asset is in a degraded condition which is reducing the level of service it is providing. Increased scheduled routine maintenance is required. High levels of unplanned maintenance are required.
5	Very Poor	Asset is a severely degraded condition which is limiting the level of service it is able to provide. Increased scheduled routine maintenance is required. High levels of unplanned maintenance are required. Planned asset renewal is required.
6 (EoL)	End of Life	Asset is no longer capable of providing any useful service and may be unsafe. Scheduled routine maintenance is no longer required as it provides no benefit. Unplanned maintenance is required to manage risk exposure. Asset may need to be closed and/or demolished.

⁵ As at 1 July 2017

Due to the characteristics of open space assets, the condition assessment is primarily subjectively based using assessor experience, condition descriptions and photographs. While greater accuracy could be achieved by using more objective measurement-based methods, any benefit would be significantly outweighed by the higher costs involved.

Independent condition assessment surveys should be undertaken every 3-4 years for strategic asset management purposes. More frequent condition assessments may be required to meet revaluation reporting obligations.

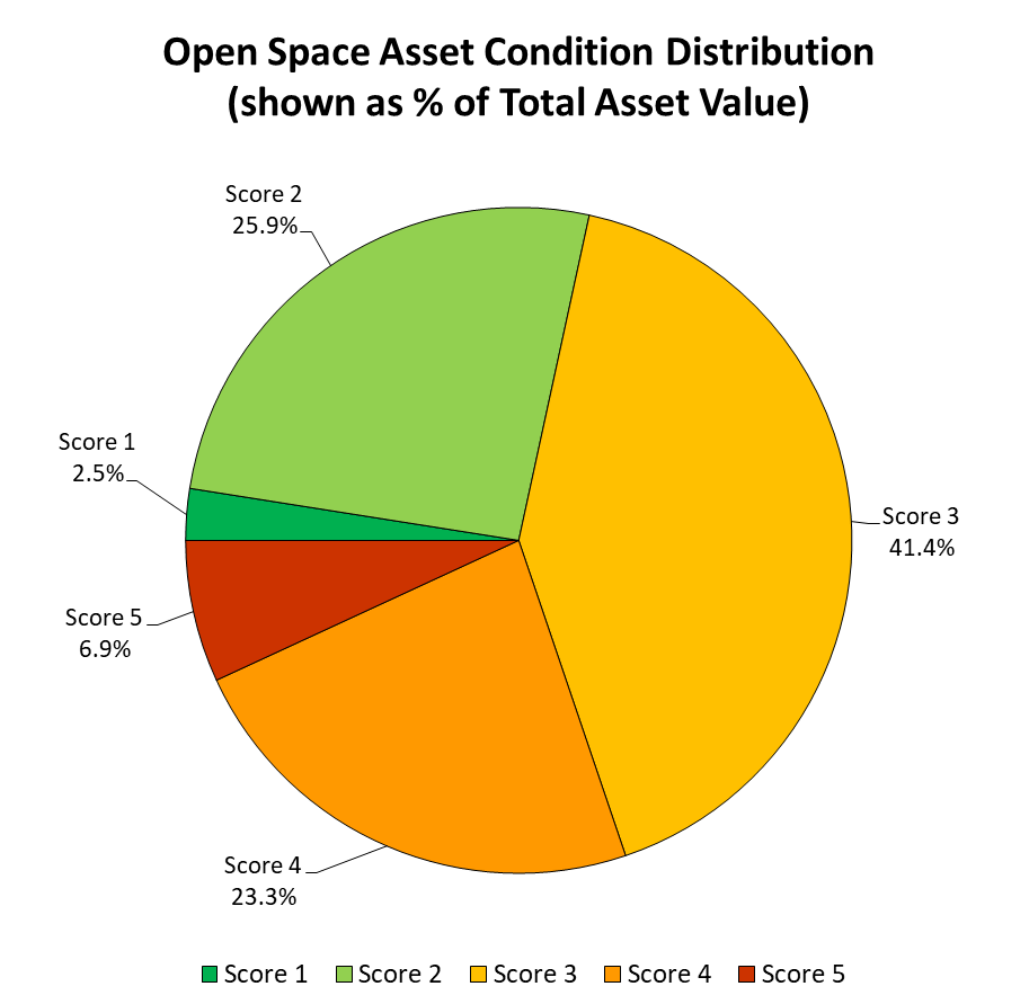
*Improvement Action 6: Document the methodology to be used for Condition Assessment of open space assets in the **Business Process Manual**.*

5.1.3 CURRENT STATE OF COUNCIL'S OPEN SPACE ASSETS

The results from the 2017 condition assessment survey of Council's open space assets are shown in Figure 4 below. Shown as a percentage of the total Replacement Value of Council's open space assets, the balance is quite good with regard to the value of assets at the beginning of their lives (*Score 1* and *Score 2*), those in mid-life (*Score 3*) and those approaching the end of their lives (*Score 4* and *Score 5*).

The challenge for Council is to maximise the community benefit obtained from the investment in open space assets by renewing old assets at the optimal point in their life. Most commonly this is at the end of an asset's useful life (*Score 4*) when it is still providing an adequate level of service without its operating and maintenance costs significantly escalating. Renewing assets earlier than this optimal point (*Score 3* or *Score 4*) will result in significantly increased annual renewal expenditure without a corresponding change in the level of service provided.

Figure 4 – Distribution of Open Space Asset Condition Scores



5.2 RISK MANAGEMENT PLAN

Council has adopted a Risk Management Policy that commits the whole of Council to a consistent and systematic approach to risk management. Table 4 below lists the range of potential risks that may have an impact on the delivery of asset management services.

Table 4 – Risks associated with the delivery of Asset Management services

Type of Risk	Description of Risk
Community Impact	Risk to the community as a consequence of delivering council services.
Environmental	Risk to the biophysical environment due to Council activities.
Occupational Health and Safety	Risk to the employees, facility or infrastructure users and contractors due to the non-compliance to Safety and Health standards.
Operational	Risks inherent in the operation of the asset.
Service Performance	Risk of failure to meet expected service performance levels.
Social	Risk to council from community as a reaction to asset construction, renewal, maintenance or demolition.
Political	Risk due to a change of political view.

Statutory Infringement	Risk of breaching statutory obligations by council.
Technical	Risk of failure of an asset on technical grounds.
Investment	Risk on over-capitalisation, under-utilisation, opportunity costs, future obsolescence and less flexibility of assets for future use.
Financial	Risk of adverse financial impact to council due to the nature of the planning and delivery of services and projects.

Improvement Action 10: Develop a comprehensive Risk Management Plan for provision and management of open space assets.

5.3 ASSET MAINTENANCE PLANS

Maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again. Maintenance is the work that must be undertaken to achieve the intended design life of the asset. While maintenance **does not extend the life** of an asset, a **failure to maintain will shorten the life** of an asset.

Maintenance comprises one of three main activities:

- **Inspections:** Scheduled examinations of assets for any regulatory non-compliance, hazards or defects. Remedial work is scheduled as required either as Planned or Unplanned depending on the action required and the urgency.
- **Planned:** Scheduled work based on time or usage intervals or predicted work based on the expected condition of the asset.
- **Unplanned:** On-demand work to repair failures and other damage to the asset.

Maintenance of Council's open spaces, parks and reserves covers the usual range of activities including grass cutting, tree pruning, garden maintenance, repair of park furniture and shelters and keeping playing fields in usable condition. This work can be either planned or unplanned.

Increasing the level of planned maintenance can reduce the incidence of unplanned maintenance events. The objective of good maintenance management is to find the balance between planned and unplanned to achieve the required outcome at the lowest overall cost.

Appendix A: Sets out levels of service for response times to unplanned maintenance. Appendix A will be reviewed in line with Improvement Action 10 - Review current maintenance practices to ensure that there is an optimum balance between Planned and Unplanned Maintenance.

Council's actual maintenance expenditure over the past 4 years is shown in Table 5 below.

Table 5 – Historical Expenditure on Open Space Maintenance

Year	2013-14	2014-15	2015-16	2016-17
Total Expenditure	\$3,385,767	\$3,674,402	\$3,508,333	\$3,519,356

While the value of maintenance expenditure has been more or less static over the past 3 years, the value of the Open Space asset portfolio has not. Through the provision of new facilities along with upgrading and expansion of existing ones, the portfolio has increased in value by around \$1.35 million or about 3%. The ongoing growth in the asset portfolio is reducing the effective size of the maintenance budget and is thus impacting on the quality of maintenance that can be delivered. Further growth forecast over the next two decades will only exacerbate this issue unless suitable mechanisms are put in place.

As noted earlier, a key activity in the Asset Improvement Plan will be establishing a process to undertake an annual funding review to ensure the funding levels are adjusted to cater for growth in the asset portfolio. Additionally the Asset Improvement Plan is to review the expenditure classification and coding practices applied to maintenance activities to ensure all renewal expenditure is correctly classified.

Improvement Action 9: Review current maintenance practices to ensure that there is an optimum balance between Planned and Unplanned Maintenance.

Improvement Action 11: Review the expenditure classification and coding practices applied to maintenance activities to ensure all renewal expenditure is correctly classified.

Improvement Action 12: Determine indices and measures to be used to review and determine the annual operational and maintenance budgets based on the open space asset portfolio size and make-up.

Improvement Action 13: Annually adjust the open space operations and maintenance budget submission for changes in portfolio size and make-up.

5.4 ASSET RENEWAL PLAN

Renewal expenditure is major work which restores, rehabilitates, replaces or renews an existing asset back to its original design parameters. Effectively, renewal expenditure makes an asset new again and restarts its design life. Renewal expenditure does not contribute to increasing the capacity or functionality of an asset. This latter work is upgrade/expansion expenditure.

In line with the modern principles of “good practice asset management”, Council is now drawing a clear distinction between upgrade, expansion and renewal expenditures. It is important that Council maintains this focus on the classification of renewal expenditure and extends the process to operations and maintenance activities. This is currently being achieved through the application of the Asset Recognition Guidelines.

As the body of knowledge from this process builds, Council will be able test with increasing confidence whether or not the level of expenditure on asset renewal matches the rate at which the assets are reaching the end of their useful lives.

Asset management software was used to predict the expected condition of Council’s open space assets over the next 20 years and the consequent level of renewal expenditure required to keep the asset portfolio in an acceptable condition.

Five renewal funding scenarios were tested starting at \$1 million per annum with each scenario increasing by \$0.5 million per annum. The starting point was chosen as \$1 million as this aligns with the estimate of renewal expenditure undertaken in 2016-17. The upper limit was set at \$3 million as little benefit was obtained from budgeting higher levels as it went largely unspent in many years.

Figure 5 on page 20 shows the forecast change in the overall Average Condition of the open space portfolio over the next 20 years. Starting at the current average score of 3.07, the forecast fall in average condition for renewal expenditures of \$1.0 million and \$1.5 million per annum is a clear indicator that higher levels of renewal expenditure is required on an on-going basis.

At the other end of the range, there is little difference in forecast average condition for renewal expenditures of \$2.5 million and \$3.0 million per annum thus indicating that there is little benefit to be achieved in increasing renewal beyond \$3.0 million per annum. The mid-range scenario of \$2.0 million per annum shows a modest improvement in overall average condition thus indicating that this level of renewal is the likely target range for Council's open space portfolio renewal expenditure.

In determining the appropriate level of renewal expenditure there is second measure that needs to be considered. Managing an asset portfolio for a satisfactory overall average condition score does not automatically ensure that the portfolio is free from defective and seriously degraded assets. For this reason it is also important to consider the percentage of the portfolio that is forecast to be in *Very Poor* condition in any year as is shown in Figure 6 on page20.

From the current figure of 6.9% of the portfolio being *Very Poor*, the renewal scenarios of \$1.0 million and \$1.5 million per annum would result in that figure rising to 47% and 31% respectively over the next 20 years. This clearly reinforces the view that these levels of expenditure are inadequate in the medium and long term.

Initially the \$2.0 million per annum scenario shows a reducing percentage of *Very Poor* assets before it too climbs away to finish at 13% after 20 years. This is a clear demonstration that the renewal task is not constant from year to year and that it changes as the character of the asset portfolio changes. With over 40% of the open space portfolio in *Fair* condition (Figure 4 on page14), an increase in renewal can be expected as these assets approach the end of their useful lives over the next 10 plus years.

With the higher levels of expenditure, the \$2.5 million and \$3.0 million per annum scenarios are forecast to reduce the percentage of assets in *Very Poor* condition to minimal levels with the benefit of the additional expenditure of the \$3.0 million per annum scenario now being seen.

Figure 5 – Forecast Change in Overall Average Condition of the Open Space portfolio

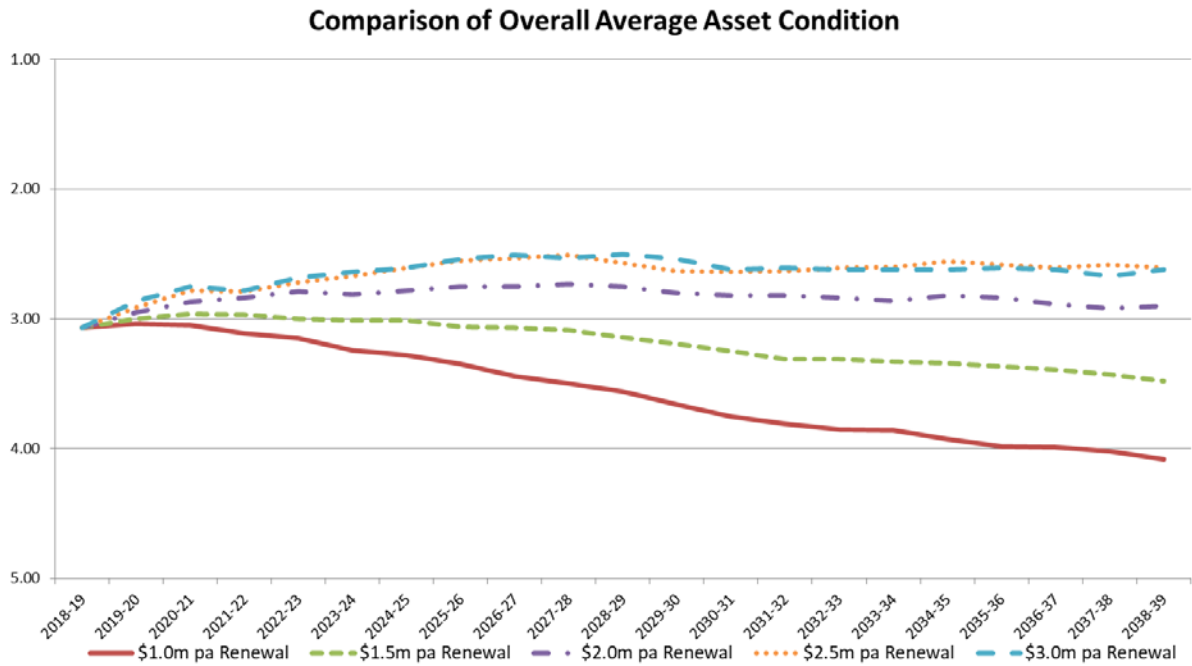
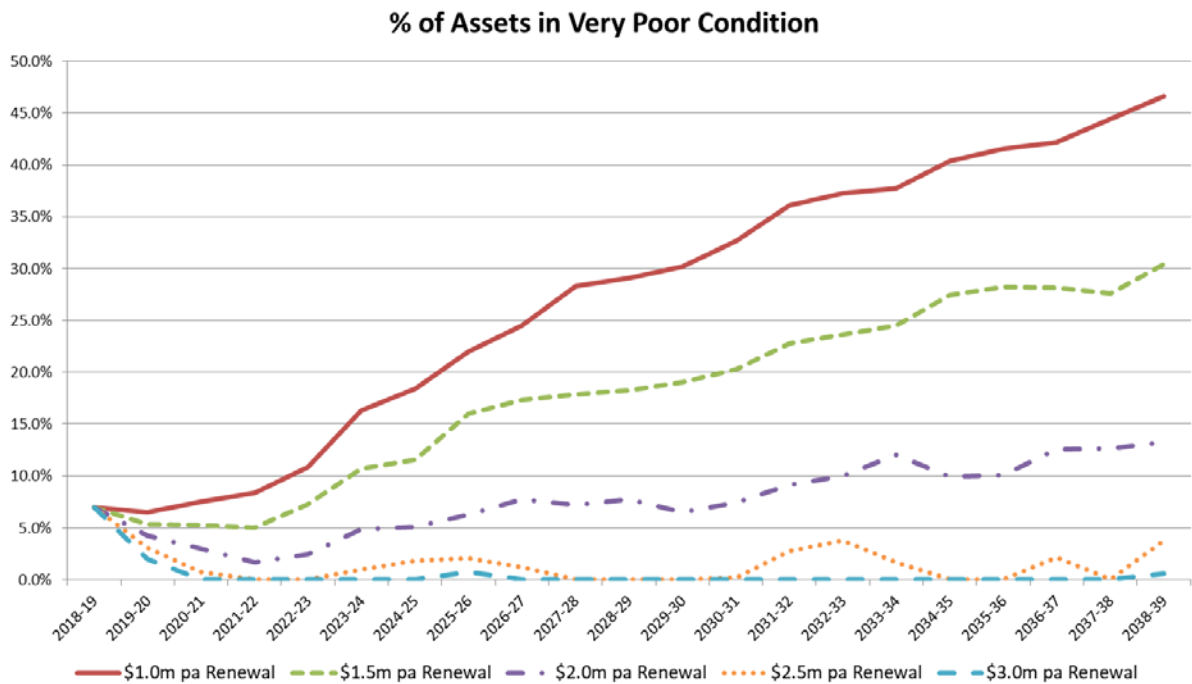


Figure 6 – Comparison of % of assets in Very Poor condition for the different funding scenarios



Council’s use of asset management prediction software is at a formative stage and further work is required to validate the inputs with particular attention being given to the asset useful lives and deterioration profiles, renewal treatment options, treatment unit rates and treatment prioritisation rules. Until that refinement work is complete, the confidence factor in the long-term forecasts is 85%. Nevertheless, it is reasonable to suggest that the short-term annual capital renewal target should be \$2.0 million per annum for the life of this Asset Management Plan.

This target of \$2.0 million aligns with the planned expenditure on open space asset renewal in the 2018-19 financial year. This is an increase over the originally planned level and is being funded through the diversion of funding from the buildings renewal program where it has been identified that some renewal projects have already been completed in 2016/17 or renewal is responsibility of others under agreement. This is part of continual review work and a service based decision which shows that the diversion of funding will give a better overall level of service to the community across both the buildings and open space asset portfolios.

Improvement Action 14: Annually update data in the asset management systems to recognise changes due to renewal or upgrade/new works undertaken or to record any significant asset degradation.

Improvement Action 15: Annually review asset management software forecasting results for significant changes in renewal programs and adjust capital funding submissions through the budget process if necessary.

5.5 NEW WORKS AND UPGRADE / EXPANSION PLANS

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the Council from land development. New assets add to Council's total life-cycle expenditure and thus are a less desirable option than the renewal or upgrading of existing assets unless the acquisition of new assets goes hand-in-hand with the disposal of redundant assets.

On its completion, *Active Bass Coast* will provide a 10 year strategic framework and a 3-5 year implementation plan from which detailed New Works and Upgrade / Expansion Plans will be developed for the open space asset portfolio.

5.6 ASSET DISPOSAL PLAN

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. It is acknowledged that the disposal of community assets can be quite sensitive in some cases. Council's best tactic is to put easily understood options to the community that demonstrate the impact on their Rates for each of the choices.

Disposal projects should be listed in a separate works program to ensure that they are funded and the change in overall asset value is tracked. The Disposal program should also recognise the net reduction in maintenance expenditure required as a result in the reduction of the size of the asset portfolio.

6. FINANCIAL SUMMARY

6.1 KEY FINANCIAL FORECASTING ASSUMPTIONS

The key financial forecasting assumptions made to prepare this Plan are:

- The service levels will remain constant over the life of this Plan;
- The treatment and maintenance costs are based on Council's current schedule of rates and may not directly compare to Council's internal service provision actual costs;
- All predicted financial figures are based on 2017-18 rates;
- Continued use of current construction techniques and materials in alignment with current standards;
- Current maintenance funding levels are meeting service level requirements;
- Capital renewal is generally 'like for like';
- Depreciation is in accordance with Council Policy; and
- Proposed capital renewal program will be funded as per the scenario recommended.

6.2 FORECAST EXPENDITURES

The 10-Year funding requirements for Council's open space asset portfolio have been determined from the following sources:

- Annual maintenance expenditures from Section 5.3.
- Suggested renewal expenditures from Section 5.4.

Table 6 below sets out the funding requirements in real cost terms and Table 7 on page 23 shows the same figures indexed to allow for inflation.

Table 6 – 10 Year Funding Requirements on a Real Cost basis⁶

Year	Capital Renewal	Maintenance & Operations
2018-19	\$2,000,000	\$3,625,000
2019-20	\$2,000,000	\$3,625,000
2020-21	\$2,000,000	\$3,625,000
2021-22	\$2,000,000	\$3,625,000
2022-23	\$2,000,000	\$3,625,000
2023-24	\$2,000,000	\$3,625,000
2024-25	\$2,000,000	\$3,625,000
2025-26	\$2,000,000	\$3,625,000
2026-27	\$2,000,000	\$3,625,000
2027-28	\$2,000,000	\$3,625,000

⁶ All figures are shown as current year (2017-18) with no adjustment for inflation

Table 7 – 10 Year Funding Requirements on an Indexed basis⁷

Year	Capital Renewal	Maintenance & Operations
2018-19	\$2,040,000	\$3,697,500
2019-20	\$2,085,900	\$3,780,694
2020-21	\$2,138,048	\$3,875,211
2021-22	\$2,191,499	\$3,972,091
2022-23	\$2,246,286	\$4,071,394
2023-24	\$2,302,443	\$4,173,178
2024-25	\$2,360,004	\$4,277,508
2025-26	\$2,424,905	\$4,395,139
2026-27	\$2,491,589	\$4,516,006
2027-28	\$2,560,108	\$4,640,196

It is recognised that consideration of factors outside the scope of this Plan will influence the extent to which the funding requirements are implemented.

Improvement Action 15: Annually review asset management software forecasting results for significant changes in renewal programs and adjust capital funding submissions through the budget process if necessary.

⁷ All figures are shown as Indexed from the current year (2017-18) using the following indices:

2018-19	2.0%
2019-20	2.25%
2020-21 to 2024-25	2.5%
2025-26 to 2027-28	2.75%

7. ASSET MANAGEMENT IMPROVEMENT PLAN

7.1 PERFORMANCE MEASURES

The effectiveness of the Open Space Asset Management Plan (OSAMP) can be measured in the following ways:

- the degree to which the required cash flows identified in this asset management plan are incorporated into Council's long-term financial planning process and works planning
- the degree to which 5-year detailed works programs, budgets, business plans and organisational structures take into account the trends provided by the OSAMP

7.2 MONITORING AND REPORTING

On-going reporting of the management of Council's open space assets will be incorporated in an annual *State of the Assets* report as set out in the *Bass Coast Asset Management Strategy 2017-2021*. The *State of the Assets* report will provide an aggregated record of the current state of Council's infrastructure assets and asset management practices to the Council and the community on an annual basis in a single document.

7.3 IMPROVEMENT PLAN

In course of preparing this OSAMP, the need has been identified for further developing Council's asset management processes and practices in relation to its open space assets. The Asset Management Improvement Plan set out in Table 8 (commencing on page 27) sets out the key improvement tasks. Completion of these tasks will lift Council's asset management capabilities for the open space asset portfolio.

7.4 ASSET MANAGEMENT PLAN REVIEW

This document has a life of 4 years and will be reviewed at that time.

REFERENCES

Asset Management Policy – Infrastructure Assets 2017-2021, Bass Coast Shire Council

Asset Management Strategy for Infrastructure Assets 2017-2021, Bass Coast Shire Council

Shaping a Better Bass Coast – Council Plan 2017-2021, Bass Coast Shire Council

Annual Report 2016/17, Bass Coast Shire Council

Our Finances, Bass Coast Shire Council (2016/17 Financial Statements)

Securing Bass Coast's Future – Our long term plan for financial sustainability, Bass Coast Shire Council

In-house Agreement No: CA97002 – Provision of Parks and Amenity Maintenance Services, Bass Coast Shire Council

International Infrastructure Management Manual, Institute of Public Works Engineering Australia

Table 8 – Asset Management Improvement Plan

Action No	Action	OSAMP Section	Completion Date
1	Review the current criticality/hierarchy ranking system used for open space assets and revise as necessary.	3.1	FYE 2018/19 in line with Asset Management Strategy Improvement Action 2
2	Create an initial set of <i>Operational Levels of Service</i> through (a) reviewing the maintenance practices taken from <i>In-house Agreement No: CA97002 – Provision of Parks and Amenity Maintenance Services</i> and (b) updating the performance standards as necessary to reflect current work practices.	3.2	FYE 2018/19 in line with Asset Management Strategy Improvement Action 2 and 6
3	Complete the preparation of the <i>Operational Levels of Service</i> by incorporating the full range of inspection and maintenance activities applicable to the management of open space assets.	3.2	FYE 2019/20 in line with Asset Management Strategy Improvement Action 6 (b)
4	Define the <i>Community Levels of Service</i> to be used to assess Council's open space asset management performance as assessed from a community perspective. *	3.2	FYE 2019/20 in line with Asset Management Strategy Improvement action 2
Business Process Manual			
5	Document the agreed <i>Community Levels of Service</i> and <i>Operational Levels of Service</i> into a <i>Business Process Manual</i> .	3.1 & 3.2	FYE 2020/21
6	Document the methodology to be used for Condition Assessment of open space assets in the <i>Business Process Manual</i> .	5.1.2	FYE 2018/19
7	Combine the open space asset provision and renewal standards set out in various Council strategies and plans into a single set of <i>Asset Provision and Renewal Levels of Service</i> and document in the <i>Business Process Manual</i> .	3.2	FYE 2018/19
8	Submit the completed <i>Business Process Manual</i> to Council for adoption.		At the adoption of next version of the Plan in 2021/22

Action No	Action	OSAMP Section	Completion Date
Asset Management Practice			
9	Review current maintenance practices to ensure that there is an optimum balance between Planned and Unplanned Maintenance.	5.2	FYE 2019/2020
10	Develop a comprehensive Risk Management Plan for provision and management of open space assets.	5.3	FYE 2019/2020
Funding and Budgets			
11	Review the expenditure classification and coding practices applied to maintenance activities to ensure all renewal expenditure is correctly classified.*	5.3	FYE 2019/20
12	Determine indices and measures to be used to review and determine the annual operational and maintenance budgets based on the open space asset portfolio size and make-up. *	5.3	FYE 2018/19
13	Annually adjust the open space operations and maintenance budget submission for changes in portfolio size and make-up.	5.3	December every year once action 13 is complete
14	Annually update data in the asset management systems to recognise changes due to renewal or upgrade/new works undertaken or to record any significant asset degradation.	5.4	August every year
15	Annually review asset management software forecasting results for significant changes in renewal programs and adjust capital funding submissions through the budget process if necessary.	5.4 & 6.2	October every year

**Improvement action which will require additional resourcing*

Appendix A: Maintenance response levels of service

An important aspect of any service level agreement is the response times required to be met when undertaking a maintenance activity. Response times will vary depending upon the nature of the work required to be undertaken to minimise the risk to the public, the users and to Council's investment in the open space asset. The higher the risk the quicker the response time required.

Recommended response times for the three classes of risk are shown in the table below, Open Space Asset Maintenance Team Response times.

Type of Risk	Response time
High Risk (Urgent repairs)	24 hours
Medium Risk (Priority repairs)	1 week
Low Risk (Normal repairs)	1 month or where programmed – as per program

In some circumstances there will be very high risks that will be responded to quicker than 24 hours as resources allow.

Response times commence from the time Council staff responsible for responding to the risk have been made aware of it.

The types of risks regarded as Very High, High, Medium and Low are shown in the table below. They are examples only rather than a comprehensive, all encompassing list.

Very High	High Risk Tasks	Medium Risk Tasks	Low Risk Tasks
Burst water main	Making a playground safe due to broken or defective equipment	Repairing the playground after the area has been appropriately secured	Programmed works. Cyclic maintenance.
Gas leak in park	Retaining wall collapsing near pathway	Repair to fencing around reserve	Replace broken park sign
Fire in recreation area	Immediate risk to health and safety of workers, public or users	Repair storm damage to assets	Repair broken garden edging
	Make safe any damage that poses a risk to public resulting from storm, vehicular damage, or other event causing structural damage to an open space asset	Repair damage from other sources	Repair barbeque