

2018-2028 PARKS ASSET MANAGEMENT PLAN
He Rautaki Whakahaere Rawa mō Ngā Papa Whānui

SERVICES

NGĀ RATONGA WHĀNUI

VOLUME FIVE | PUKAPUKA TUARIMA



Mountain to Sea
Te Kaunihera-ā-Rohe o Ngāmotu
NEW PLYMOUTH DISTRICT COUNCIL
newplymouthnz.com

DOCUMENT CONTROL

Document Name	2018-2028 Parks Asset Management Plan Volume 5 - Services
Prepared By	Steve Ilkovics, Asset Operations Planning Lead Cristina Gonzalez, Asset Engineer
Reviewed By	Stuart Robertson, Manager Parks and Open Spaces
Approved By	David Langford, Infrastructure Manager

August 2018



1. Introduction	5	3. Risk Management Plan	16
2. Lifecycle Management Plan	8	3.1 Critical Assets	16
2.1 Asset Description	8	3.2 Risk Assessment	16
2.1.1 Cemeteries	8	3.3 Infrastructure Resilience Approach	16
2.1.2 Crematorium	9	4. Financial Summary	17
2.1.3 Brooklands Zoo	9	5. Improvement and Monitoring Plan	18
2.2 Asset Condition	11		
2.3 Asset Remaining Lives	12		
2.4 Asset Valuation	12		
2.5 Operations and Maintenance	12		
2.5.1 Cemeteries	12		
2.5.2 Crematorium	13		
2.5.3 Brooklands Zoo	13		
2.6 Renewals Plan	14		
2.7 Acquisition and Augmentation Plan	15		
2.8 Disposal Plan	15		

LIST OF TABLES & FIGURES

List of Tables

Table 1 Asset management document structure	5
Table 2 Cemeteries location and details	8
Table 3 Zoo animal details	10
Table 4 Crematorium asset condition grades	11
Table 5 Zoo habitats asset condition grades	11
Table 6 Crematorium asset expected lives	12
Table 7 Zoo habitats expected lives	12
Table 8 Renewal expenditure forecast	14
Table 9 Levels of service expenditure forecast	15
Table 10 Capex forecast summary	17
Table 11 Improvements summary	18

List of Figures

Figure 1 Cemeteries location map	8
----------------------------------	---



1. INTRODUCTION

This volume provides details of the asset lifecycle management for the **Services** asset category of the Parks AMP. The framework and key elements of the overall asset management plan are outlined in Table 1.

Table 1 Asset management document structure

No.	Document Name	Key Document Contents
1	Long Term Plan	Infrastructure Strategy <ul style="list-style-type: none"> • Strategic Framework • Guiding Themes • High Level Information for Each Asset Class Council Services <ul style="list-style-type: none"> • High Level Information • Levels of Service • Financial Plan
2	Asset Management Strategy	General Asset Management Principles and Overview
3	Asset Class General Volumes	General Information and Glossary about each asset class <ul style="list-style-type: none"> • Executive Summary • Introduction • Levels of Service • Future Demand • Risk Management Plan • Financial Summary • Plan Improvement and Monitoring

4	Asset Category Lifecycle Management Volumes	Asset Life Cycle Management for each asset category within each asset class <ul style="list-style-type: none"> • Description • Condition • Remaining Lives • Valuation • Operations & Maintenance • Renewals • Acquisition and Augmentation • Disposals • Annual Work Plan • Risk Management • Financial Summary • Improvement Plan
---	---	---

Purpose and Key Issues

The purpose of cemeteries is:

- To provide an area to facilitate the dignified placement of deceased persons.
- To provide areas of open space.
- To provide a link to the past, preserving cultural identity and heritage value.
- To contribute to the health and wellbeing of the Community.

The key issues related to cemeteries are:

- Provision of new cemeteries to accommodate reduced capacity and changing community demands (e.g. natural burials).
- Capacity of existing cemeteries.
- Ongoing health and safety of operations staff.
- Ongoing serious vandalism.
- Changes in legislation and standards, and compliance issues.

1. INTRODUCTION

The purpose of the Crematorium is:

- To provide a facility for cremating human remains.
- To provide a chapel for memorial services.
- To provide a reflection point and area to place cremated human ashes.

The key issues related to the crematorium are:

- Ensuring continued provision of a dignified setting for services.
- Keeping abreast of technology to deliver changing community and customer demands.
- Changes in legislation and standards, and compliance issues.
- Reduced use following introduction of privately owned cremation facility.
- Health and Safety of operations staff.

Brooklands Zoo currently displays a captivating collection of exotic wild fauna as well as a representation of New Zealand native fauna and classic New Zealand farm stock. It provides an exciting visitor experience while inspiring people to take positive action that will benefit wildlife and the environment.

Brooklands Zoo is highly regarded in Australasia, both by the public and the zoo industry. It is well managed and well used. Entry is free of charge, although donations can be made through an on-site donation box. The key issues relevant to the development and operation of the Zoo are:

- Meeting EPA (Environmental Protection Authority) and MPI (Ministry for Primary Industries) regulations for containing exotic animals, which requires an annual licence.
- Meeting community demand for increased levels of service particularly increased opening hours during daylight savings.
- Maintaining and developing an exciting display of animals, birds and reptiles.
- Animal assets are not included in the current certified valuation.
- Strategic Plan Development
- Meeting Zoo and Aquarium Association (ZAA) requirements relating to animal welfare
- Enhancing conservation values at the zoo and increasing community awareness of conservation by restoring and displaying native NZ species
- Infrastructure and parking



1. INTRODUCTION

Levels of Service

The levels of service for the operations, maintenance, renewals and minor improvement of the structures in the park service are included in Section 3 of the Parks General AMP volume. Cemeteries and the Crematorium – Related legislation, codes and standards:

- Burial and Cremations Act 1964
- Health Act 1956
- Reserves Act 1977
- Births Deaths and Marriages Registration Act 1995
- Burial and Cremation Regulations 1973
- Health (Burial) Regulations 1946
- Burial and Cremation (Removal of Monuments & Tablets) Regulations 1967
- Council By-laws (NZ Standard for headstones NZS 4242:1995)
- General Policies for Council Administered Reserves (P06-003) 2006
- New Plymouth District Cemeteries Management Plan 2012

The specific policies for Brooklands Zoo are:

- EPA Standard for Zoo Containment Facilities (2018). Brooklands Zoo houses introduced animals and organisms (e.g. monkeys, otters, frogs and birds) that could pose a risk to the biosecurity of New Zealand if they breach the zoo confines;
- ZAA policies - to concentrate breeding programmes on threatened or endangered species, based on the recommendations of the Australasian Species Management Programme (ASMP) and Department of Conservation (DOC) captive management programme; and
- The Pukekura Park Management Plan (2004).

Future Growth

Population growth and increased tourism numbers will result in greater use of Brooklands Zoo. Catering for increased use and satisfying changing trends in participation will require increased capacity and improvements to existing parks assets.

Population growth and an increased ageing population are also prime considerations for cemeteries, including managing reduced capacity at existing sites. We have now established a new cemetery site at Mangapouri that can cater for both growth and changing community demands (e.g. natural burials).

Note: All financial forecasts are shown in inflation adjusted dollar values.



2. LIFECYCLE MANAGEMENT PLAN

2.1 Asset Description

2.1.1 Cemeteries

There are 14 cemeteries in the district, of which 11 are operational and three are either closed or under development (almost ready for opening). All cemeteries are shown on the map in Figure 1 and are listed in Table 2.

Figure 1 Cemeteries location map



Table 2 Cemeteries location and details

Cemetery	Street	Town	Area (ha)	Status
Awanui	Awanui Street	New Plymouth	12.33	Operational
Mangapouri (New)	Plantation Road/SH3	New Plymouth	20.3	Under Development
Inglewood	Rata Street	Inglewood	2.52	Operational
Marsland Hill	Robe Street	New Plymouth	0.22	Closed
Oakura	Butler's Lane	Oakura	0.89	Operational
Okato	South Road/SH45	Okato	1.98	Operational
Purangi	Purangi Terrace	Rural	0.86	Operational
Tarata	Wiri Road	Rural	2.09	Operational
Tataramaika	Lower Timaru Road	Rural	0.88	Closed
Te Henui	Watson Street	New Plymouth	10.05	Operational
Urenui	Ngapapa Street	Urenui	1.46	Operational
Waireka	Gardner Road	Rural	1.01	Operational
Waitara	Bayly Street	Waitara	5.75	Operational
Waitara Historic	McLean Street	Waitara	0.07	Closed
Total			61.54	

There are also four other cemeteries in the district run by Cemetery Boards. Two of these, Tikorangi and Tongaporutu, are located on Council-owned land. The other two, Huirangi and Lepperton, are located on Department of Conservation Land.

Under the Burial and Cremation Act 1964, we appoint or remove Trustees on Cemetery Boards but otherwise have no direct involvement with the management or ownership Cemetery Board assets. The assets are owned by the Cemetery Board until such time as the Board ceases to operate.

Should the Cemetery Board cease to operate, then the cemetery assets and management are vested in the Council. For example, Okato Cemetery was formerly controlled by a Cemetery Board but was vested in us in 2008 when the Board ceased to operate. The 2,226m² Marsland Hill cemetery, which is now closed, is part of the larger historic site (3.86ha) and is contained within the Historic Reserves Management Plan 2010.

2. LIFECYCLE MANAGEMENT PLAN

Cemeteries also include a number of features that are not incorporated in this volume but included in the corresponding Parks asset category volumes e.g. fences, rubbish bins, seats, paths etc.

2.1.2 Crematorium

The Crematorium is located in a semi-rural setting on SH3 about 8km south of New Plymouth CBD.

The Burials and Cremation Act 1964 does not require a local authority to provide a crematorium facility. However, until the 1960s the nearest crematorium facilities were located in Whanganui and Hamilton. The crematorium buildings and facility were built in the early 1960s to meet demands of the regional community.

In March 2009, W. Abraham Limited, Funeral Directors, opened a private cremation facility in New Plymouth. Consequently, demand at the Taranaki Crematorium has reduced by approximately 40-45%.

The crematorium contains various asset types ranging from the buildings and chapel and their associated fixtures and fittings, through to highly specialised (and expensive) plant and machinery items. This includes the cremators, the cremulator (used to grind remaining bone fragments into fine powder) and the air conditioning system. It also includes miscellaneous park assets such as roads, car parks, fences, seats, monuments etc. These are not incorporated in this volume but included in the corresponding Parks AMP volumes. As with any similar sensitive activity, the crematorium grounds are well maintained with lawn areas, trees and gardens, including the Garden of Remembrance.

The Newton cremator was installed in 1996 and upgraded in 2007. However, as a result of reduced usage it is deteriorating and the internal firebricks have deteriorated. The hot faces were re-lined in 2017 at a cost of \$300k, approximately \$30k was spent on other repairs and a full service was conducted by Austeng in 2013. This extended the cremator life but a full renewal in 2018/19 at cost of \$505k is now required and is included in the Property AMP Volume 7 – Parks Buildings.

The building, cremators and other major equipment such as the cremulator, catafalque (raised stand for coffins/caskets) etc. and chapel furniture renewals and valuations are managed by the Property team on behalf of Parks and Recreation. The valuation and depreciation details of these assets are included in the Property AMP.

The Property team manages maintenance and operations on the Park Services buildings. Other crematorium assets and all other maintenance and operations are managed by Parks team.

2.1.3 Brooklands Zoo

Brooklands Zoo is located within a self-contained area adjacent to Brooklands Park, an historic landscape garden. Both Brooklands Zoo and Brooklands Park are part of the greater reserve area of Pukekura Park.

Occupying a one hectare site, the Zoo facility includes a central public open space with public toilets, a children's playground, seating, picnic tables, trees and gardens. Surrounding the site is a series of animal habitats including a free flight aviary and other bird habitats, exotic animal habitats, and a farmyard and barn display of domestic animals. The animal collection is primarily aimed at younger children and families.

Since its inception in the 1960s Brooklands Zoo has undergone development, particularly in the early-mid 1990s and from 1999 to 2001 when the layout was revised and significant improvements were made to several buildings and habitats. These infrastructure improvements have increased the popularity of the Zoo and consolidated its attraction as a visitor destination in its own right.

Although the Zoo is owned by us, the animal collection is a mixture of 'owned' and 'on loan' animals in accordance with agreements between zoos that are members of the Zoo and Aquarium Association of Australasia (ZAA). Brooklands Zoo is considered important as both a 'holding' zoo and for its breeding programmes of exotic species through ZAA; for example, the Squirrel Monkeys and Cotton Top Top Monkeys/ Tamarins.

Zoo visitor numbers have been electronically recorded since August 2008. Data shows the zoo receives an average of about 113,000 visitations annually. With free entry, the Zoo is funded from general rates.

The exotic, farmyard, birds, aquatic and reptile species included in the animal collection are listed in Table 3. The replacement value and depreciated replacement values were not included in the 2013 certified valuation process as there is no dollar value for the animals.

2. LIFECYCLE MANAGEMENT PLAN

Table 3 Zoo animal details

The data presented in this AMP on the quantity and type of the assets is classed as grade **B – Reliable** due to our well maintained and updated asset inventory in EAM.

Asset Type	Asset	Number
Exotic	Capuchin	6
	Cotton-top tamarin	2
	Oriental small-clawed otter	2
	Meerkat	4
	Bolivian squirrel monkey	6
	Brolga crane	1
	African clawed frog	1
Farmyard	Kune kune pig	2
	Alpaca	3
	Guinea pig	4
Birds	Red winged parrot	3
	King parrot	2
	Derbyan parrot	1
	Princess parrot	2
	Eclectus parrot	3
	Indian ring neck	6
	Musk lorikeet	1
	Rainbow lorikeet	2
	Barraband/Superb parrot	2
	Sulphur cockatoo	1
	Golden pheasant	1
	Lady amherst pheasant	2
	Chicken	9
	Guinea fowl	2
Aquatic / Reptile	Blue tongue skinks	2
	Leopard gecko	1
	Tetras	3
	Green and gold bell frogs	4
	Oriental fire bellied newts	2



2.2 Asset Condition

Apart from the general Parks assets located in cemetery grounds e.g. fences, rubbish bins, seats, paths etc, cemetery assets do not require condition assessments.

Similarly the condition of general Parks assets located in the Crematorium grounds are included in the corresponding Parks AMP volumes. The condition of the Crematorium building is addressed in the Property AMP. The condition of the other significant assets at the Crematorium is shown in Table 4.

Table 4 Crematorium asset condition grades

Component	Condition Grade
Cremator - Newton	4- Poor
Cremator - Electfurn	2 - Good
Cremulator	3- Average
Catafalque	2 - Good
Security Camera & System	1 - Excellent
Organ	1 - Excellent

As part of MPI statutory requirements, an external consultant inspects the animal habitat structures at Brooklands Zoo once a year. The condition of the habitats is shown in Table 5.

Table 5 Zoo habitats asset condition grades

Habitat	Condition
A1,A2,A3 - Holding Structures	3 - Average
E1 - Capuchin Habitat	2 - Good
E2 - Tamarin Habitat	3 - Average
E3 - Otter Habitat	2 - Good
E4 - Meer Kat Habitat	3 - Average
E5 - Squirrel Monkey Habitat	3 - Average
E6 - Brolga Habitat	3 - Average
Aviary (Free Flight Habitat)	3 - Average
Farm Animal Habitat	3 - Average
Old Kitchen (behind Meerkat Habitat)	3 - Average

In the past, we have assessed the condition of all general Parks assets every three years, with the last assessment conducted in 2013. In 2016, we extended the timeframe of condition assessment to 5-6 years for general assets, retaining assessment at shorter intervals for a selection of more significant general assets.

In general, Parks features assets deteriorate slowly with some exceptions related to weather events or installation in a marine environment.

The data presented in this AMP on the condition of the assets is classed as grade **B – Reliable** due to the data being based on sound records, procedures and regular condition inspections.

2. LIFECYCLE MANAGEMENT PLAN

2.3 Asset Remaining Lives

Cemetery assets do not require remaining life assessments. Information about general Parks assets located in the cemetery and crematorium grounds e.g. fences, rubbish bins, seats, paths etc, can be found in the other Parks AMP volumes.

The remaining life of the Crematorium building is addressed in the Property AMP. The remaining lives of the other significant assets at the Crematorium are shown in Table 6.

Table 6 Crematorium asset expected lives

Component	Expected Life (Years)
Cremator - Newton	2
Cremator - Electfurn	10
Cremulator	4
Catafalque	18
Security Camera & System	5
Organ	5

The remaining lives of the animal habitats at Brooklands Zoo are shown in Table 7.

Table 7 Zoo habitat expected lives

Item	Expected Life (years)
A1,A2,A3 - Holding Structures	20-40
E1 - Capuchin Habitat	40
E2 - Tamarin Habitat	20-40
E3 - Otter Habitat	40
E4 - Meer Kat Habitat	20-40
E5 - Squirrel Monkey Habitat	>20
E6 - Brolga Habitat	20-40
Aviary (Free Flight Habitat)	20
Farm Animal Habitat	20-40
Old Kitchen (behind Meerkat Habitat)	20-40

The data presented in this AMP on the remaining life of assets is classed as grade **B** – Reliable due to the data being based on sound knowledge, standards and guidelines.
Document Set ID: 7819263
Version: 1, Version Date: 11/09/2018

2.4 Asset Valuation

There is no asset valuation included in this volume as the buildings and assets associated with cemeteries, the Crematorium and Brooklands Zoo are included in the Property AMP. The values of general Parks assets e.g. fences, rubbish bins, seats, paths and so on are included in the corresponding Parks AMP volume covering these asset categories.

2.5 Operations and Maintenance

2.5.1 Cemeteries

Planned Operations and Maintenance

The degree of maintenance required for each individual cemetery depends on the age of the cemetery, the weather and level of wear and tear.

Reactive Maintenance

Reactive maintenance is most frequently required for vandalism activities (graffiti, broken glass, vehicle damage) or vegetation clearance such as broken tree branches. These issues are identified through regular inspections or through tracked customer complaints. This includes advising the private owners of headstones and monuments of any remedial repair work that may be required.

Routine Operations and Maintenance

Routine operations and maintenance at cemeteries includes grave digging and filling, ground reinstatement, mowing, tree trimming, garden presentation, toilet cleaning and rubbish removal. The sensitive nature of cemeteries and their importance to the cultural and social wellbeing of the Community means cemetery turf, gardens and trees are maintained to a higher standard than regular parks and reserves.

Major Maintenance

The need for major repairs is infrequent. The intensive routine and planned maintenance activities ensure that major maintenance issues are a rarity.

2.5.2 Crematorium

Planned Operations and Maintenance

Scheduled maintenance requirements are identified through our inspections of the Crematorium and facilities. Parks staff in conjunction with specialist consultants conduct condition assessments of all critical assets within the Crematorium area every three years. Plant and Equipment assets such as cremators and cremulator undergo annual inspection by the manufacturers as a preventative maintenance initiative. Items of maintenance identified in internal assessments and consultant reports are passed to the programmes team to schedule into planned work flows.

Reactive Maintenance

Reactive maintenance is most frequently required after power and/or gas cuts. We also monitor the fuel tanks for consistency and to ensure they do not drop below 30% full. We perform reactive maintenance following any damage to turf or gardens arising from either weather incidents or heavy use of the chapel facilities.

Routine Operations and Maintenance

Routine operations and maintenance at the Crematorium includes loading the cremators, ash removal, loading and removal from the cremulator, boxing ashes for collection by Funeral Directors, removing metal objects (such as knee and hip replacement joints) for later burial on-site, chapel cleaning and presentation. There is also intensive mowing, tree trimming and garden presentation. The sensitive nature of the Crematorium and its importance to the cultural and social wellbeing of the Community means its turf, gardens and trees are maintained to a higher presentation standard than regular parks and reserves.

Major Maintenance

For preventative maintenance the cremators undergo major inspection and overhaul annually.

2.5.3 Brooklands Zoo

The maintenance of the Zoo grounds and buildings fall into our generic general Parks and building maintenance activities. The maintenance procedures for the care and containment of animals are outlined in the Brooklands Zoo containment plan which includes:

- Procedures for opening and closing the zoo
- Public access, security and public safety escape preventions
- Habitat standards

- Inspection and maintenance routines
- Structural components
- Physical/psychological care and wellbeing of animals (animal welfare)
- Urgent maintenance
- Reporting procedures etc.

We do require additional work to determine both the community's expectations for this facility and the zoo's continuing role in the wider captive breeding programme through ZAA.

Planned Operations and Maintenance

We have an annual programme that sets out the management, the projected aims and philosophies, resources and education programmes for Brooklands Zoo. We determine our planned maintenance activities at the start of each financial year, including reviewing policies and procedures, planning for animal collections, visitor strategies (education, interpretation and visitor experience) and risk management and mitigation strategies.

It should be noted that in accordance with ZAA recommendations, there is no guarantee that animals lost either through natural attrition or transfer to another zoo's breeding programme will be replaced by the same species, or at all. If animals are replaced under ZAA, the transfer cost is generally borne by the zoo receiving the animals.

Reactive Maintenance

Reactive maintenance is generally undertaken in response to health and safety issues for animals, staff, and visitors, natural events e.g. tree's falling and through customer enquiry or expectation.

Routine Operations and Maintenance

Routine operations and maintenance includes animal management activities such as general daily care, health care, enrichment and welfare of the animals, and updating collection records. It includes covers interaction with the public, including school visits and educational groups.

Major Maintenance

Major maintenance is infrequent, but is most likely to be required for the hard assets associated with the zoo animals such as cages, security fencing and drainage works.

The general 10-year Opex forecast for Parks assets is included in the Parks General Volume.

2. LIFECYCLE MANAGEMENT PLAN

2.6 Renewals Plan

The renewals forecast includes a general provision for miscellaneous renewals at Brooklands Zoo and the renewal of two animal habitats based on the existing condition assessments and estimated remaining life. Renewal plans for assets at the crematorium are included in Property Amp Volume 7 – Parks Buildings. The renewals forecast is shown in Table 8.

Table 8 Renewal expenditure forecast

Services Renewals Expenditure Forecast (\$000)											
Activity	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	LTP Total
PK1011 - Brooklands Zoo - Renewals	25	26	26	27	27	28	29	29	30	31	278
PK2008 - Brooklands Zoo -Renewal of Outdoor Monkey Habitats	-	-	-	-	-	450	-	-	-	-	450
PK2009 - Brooklands Zoo - Renewal of Free Flight Habitat	-	-	-	430	-	-	-	-	-	-	430
Total	25	26	26	457	27	478	29	29	30	31	1,158

2.7 Acquisition and Augmentation Plan

Acquisition

No services assets acquisitions are planned during the period of this AMP.

Level of Service

Details regarding the level of service projects planned during the period of the AMP are included below:

- PK1034 - Increase in burial capacity at the Urenui Cemetery which is estimated to reach capacity in 2024. Given the level of physical work required, recommendations are for a settling period of three years prior to use. Combined with the year it will take to undertake the works, this project will take 4 years and should be programmed for 2019/20 to ensure it occurs before the cemetery meets capacity. The project is in response to demand from the local community demand, which benefits from the continuance of a local cemetery.
- PK1037 - Concrete strip foundation at ground level for placement of memorials / headstones finished at all cemeteries. This will ensure cemeteries are prepared for future use and memorial installations.

The expenditure forecast for level of service projects the period of the AMP is shown in the table below.

Table 9 Levels of service expenditure forecast

Services Level of Services Expenditure Forecast (\$000)											
Activity	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	LTP Total
PK1034 - Urenui Cemetery Extension	-	179	-	-	-	-	-	-	-	-	179
PK1037 - Cemetery Memorial Beams	22	23	23	24	24	25	25	26	27	27	246
Total	22	202	23	24	24	25	25	26	27	27	425

Growth

No growth projects are planned during the period of the AMP. However the Urenui Cemetery Extension Project above includes a 50% growth component.

2.8 Disposal Plan

Disposal is the retirement or sale of assets when they become surplus or superseded by new or improved systems. Assets may become surplus to requirements for any of the following reasons:

- Under-utilisation
- Obsolescence
- Provision exceeds required level of service
- Replacement before end of predicted economic life
- Uneconomic to upgrade or operate
- Policy changes
- Service provided by other means (e.g. private sector involvement)
- Potential risk of ownership (financial, environmental, legal, social)

No asset disposals are planned over the 10 year AMP period.

3. RISK MANAGEMENT PLAN

3.1 Critical Assets

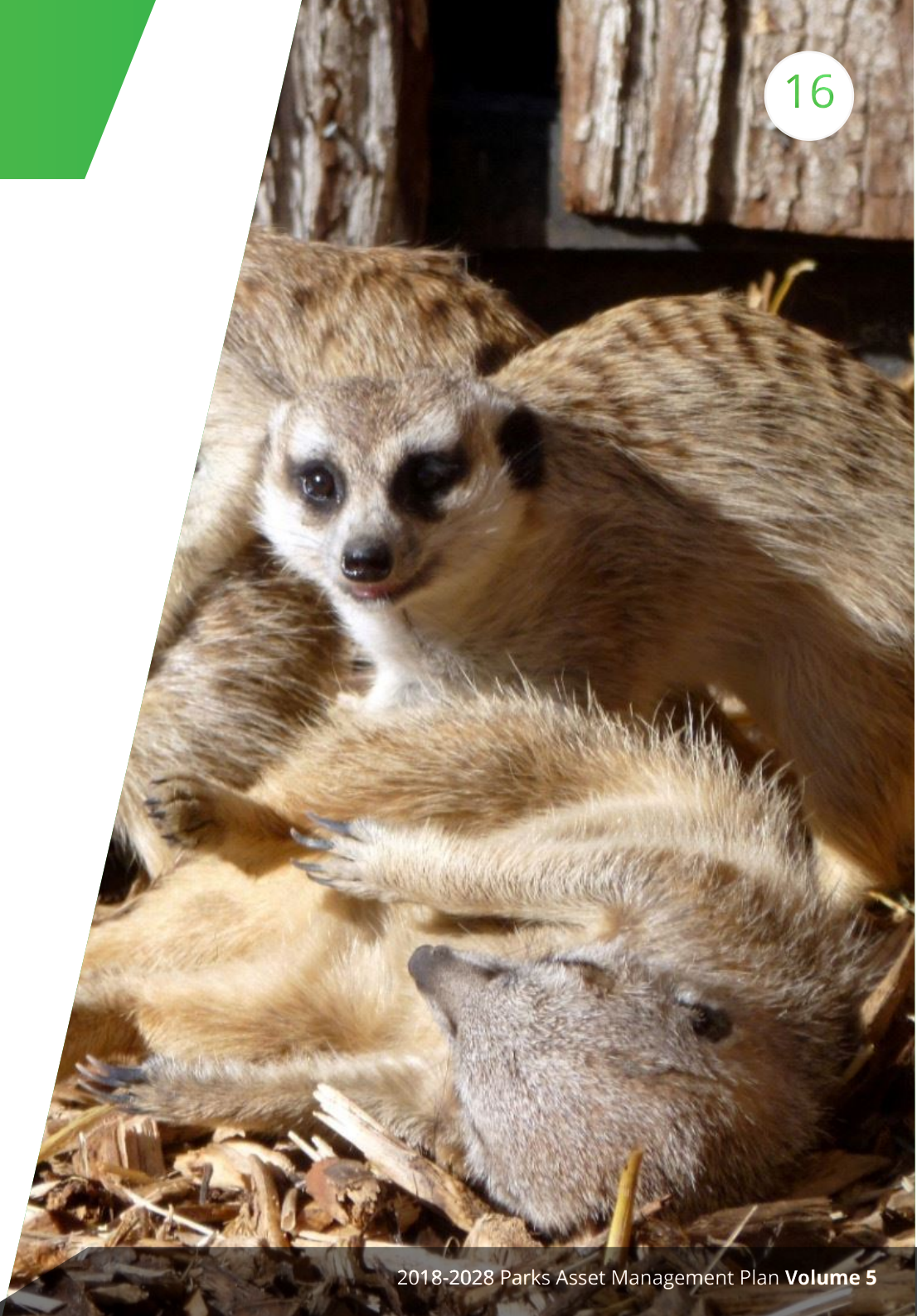
Criticality assessments for Parks assets are based on Parks team knowledge and experience. We have not yet conducted formal criticality assessments and recorded them in EAM, but we do plan to do so in the future. **This is recorded as an action in Section 5 - Improvement and Monitoring Plan.**

3.2 Risk Assessment

Details of our Risk Management Framework are included in section 6.2 of the Parks General AMP volume and section 7 of the Asset Management Strategy.

3.3 Infrastructure Resilience Approach

During the development of this Parks Asset Management Plan, we have investigated and assessed opportunities to enhance asset resilience and where appropriate, included investment.



4. FINANCIAL SUMMARY

A summary of the expenditure forecasts included in this volume is shown in Table 10.

Table 10 Capex forecast summary

Services Forecast (\$000)											
Activity	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	LTP Total
Renewals	25	26	26	457	27	478	29	29	30	31	1,158
Service Level	22	202	23	24	24	25	25	26	27	27	425
Growth	-	-	-	-	-	-	-	-	-	-	-
Total	47	228	49	481	51	503	54	55	57	58	1,583

The Opex forecast for operations and maintenance is included in the overall Opex forecast for Parks as detailed in the LTP and included in the Parks General Volume.

5. IMPROVEMENT AND MONITORING

Our general Asset Management Maturity Improvement Plan is included in the Asset Management Strategy.

General improvements to Parks assets are included in the Parks General Volume. The specific areas of improvement identified for treatment plant assets are listed in Table 11.

Table 11 Improvements summary

No	Improvement Area	Owner	Start Date	End Date
1	Criticality assessments for services assets have not been carried out. We plan to conduct an assessment in the future to assist inspection and maintenance planning.	Asset Operations Planning Lead	Jul 2018	Jun 2019



2018-2028 PARKS ASSET MANAGEMENT PLAN
He Rautaki Whakahaere Rawa mō Ngā Papa Whānui

SERVICES NGĀ RATONGA WHĀNUI

VOLUME FIVE | PUKAPUKA TUARIMA

