

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

# ROADS, CAR PARKS & PATHS

NGĀ HUARAHI / NGĀ TŪNGA WAKA / NGĀ ARA HĪKOI

VOLUME THREE | PUKAPUKA TUATORU



Mountain to Sea  
Te Kaunihera-ā-Rohe o Ngāmotu  
**NEW PLYMOUTH DISTRICT COUNCIL**  
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# DOCUMENT CONTROL

Document Name	2018-2028 Parks Asset Management Plan Volume 3 - Roads, Car Parks & Paths
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# 1. INTRODUCTION

This volume provides details of the asset lifecycle management for the **Roads, Car Parks & Paths** 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**

Document Name		Key Document Contents
1	Long Term Plan (LTP)	Infrastructure Strategy <ul style="list-style-type: none"> <li>• Strategic Framework</li> <li>• Guiding Themes</li> <li>• High Level Information for Each Asset Class</li> </ul> Council Services <ul style="list-style-type: none"> <li>• High Level Information</li> <li>• Levels of Service</li> <li>• Financial Plan</li> </ul>
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"> <li>• Executive Summary</li> <li>• Introduction</li> <li>• Levels of Service</li> <li>• Future Demand</li> <li>• Risk Management Plan</li> <li>• Financial Summary</li> <li>• Plan Improvement and Monitoring</li> </ul>

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

The Parks roads and carparks network allows reasonable access to and within parks, reserves and open spaces. The key issues facing roads and car parks are:

- High cost of road surface renewals.
- Low use of some sealed roads allowing weed and moss infestation resulting in rapid deterioration of the surface seal.
- Many car parks are unsealed and do not meet user expectations.
- Increased usage of roads within parks, especially Pukekura Park and the TSB Bowl of Brooklands.

The purpose of general walkways and paths in parks is to provide informal recreational opportunities and off street commuting options. The Coastal Walkway provides a unique and high quality (premier) area of open space and a multi-use pathway in close proximity to the CBD and the coast.

The key issues facing walkways and paths are:

- Programming regular inspections and condition assessments of the walkway and path surfaces.
- Standardising design and materials for walkway and path maintenance.
- Maintaining the design integrity and quality of an internationally recognised asset (Coastal Walkway)
- Maintaining a diverse range of assets built on different coastal environments.
- Coastal monitoring to gauge the impact of storm events on assets.
- Increasing demand by different user groups and perceived conflicts of space, particularly between pedestrians and cyclists.

## 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.

Related Policies:

- General Policies for Council Administered Reserves (P06-003) 2006
- NPDC Cycle Strategy 2007
- Regional Walking and Cycling Strategy for Taranaki 2007
- Coastal Strategy 2006
- Coastal Erosion Strategy 1995

Related Management Plans:

- New Plymouth District Neighbourhood Reserves Management Plan 2009
- Waitara Neighbourhood Parks Management Plan 2009
- Coastal Reserves Management Plan 2006
- Pukekura Park Management Plan 2004
- Historic Reserves Management Plan 2010
- New Plymouth District Cemeteries Management Plan 2012
- Sports Park Management Plan 2012
- Barrett Domain Management Plan 2013

Other Related Plans:

- TSB Stadium Multisport Development Master Plan 2012
- Roads and car parks shall meet the minimum standards for NZTA
- NPDC Paths and Tracks Manual

## Future Demand

Roads and parking spaces for parks are going to increase with growth. We have a responsibility to maintain these areas and access to these areas. The levels of service projects responding to the growth of the roads and car parks and general projects responding planned growth areas in the district are included in the Parks General volume.

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

# 2. LIFECYCLE MANAGEMENT PLAN

## 2.1 Asset Description

The assets included in this volume consist of three categories. The categories and the number of each asset in each category are shown Table 2.

**Table 2 Asset summary**

Asset Category	Quantity
Roads	137,412m <sup>2</sup>
Car Parks	68,531m <sup>2</sup>
Paths	93,048m

### 2.1.1 Roads and Car Parks

The different materials used to construct road and car park assets and the quantity and square meterage are shown in Table 3.

**Table 3 Roads and car parks asset details**

Asset Material	Roads (m <sup>2</sup> )	Car Parks (m <sup>2</sup> )
Asphalt	7,644	1,712
Chipseal	99,625	58,011
Concrete	2,758	40
Grass	1,436	1,075
Gravel	25,949	7,693
Total	137,412	68,531

### 2.1.2 Paths

The different materials used for constructing paths and the lengths of path assets are shown in Table 4.

**Table 4 Paths asset details**

Path - Material	Length (m)
Asphalt	585
Chip seal	4,802
Concrete	18,951
Dirt	331
Aggregate	150
Grass	11,054
Gravel	31,393
Natural	25,633
Pavers	149
Grand Total	93,048

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

# 2. LIFECYCLE MANAGEMENT PLAN

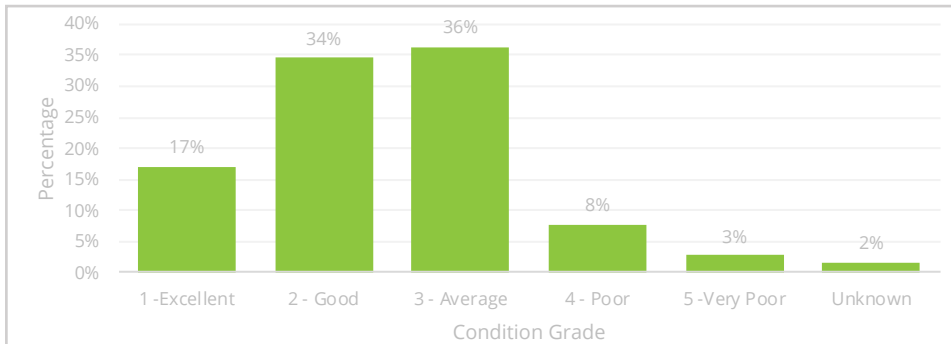
## 2.2 Asset Condition

In the past, we 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.

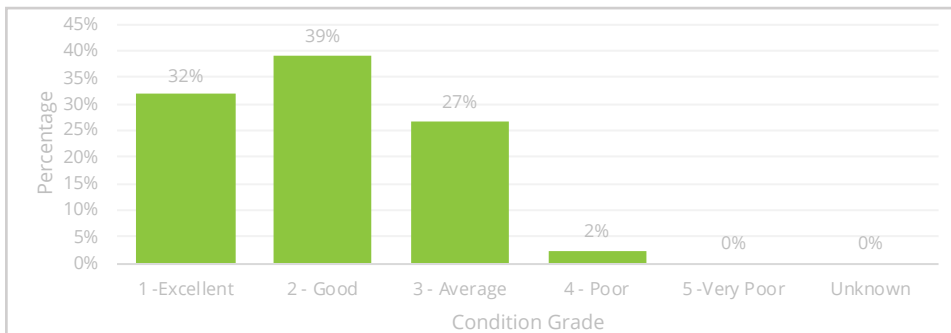
In general Park assets such as roads, car parks and paths deteriorate slowly because they experience low speed and usage in comparison to transportation assets.

The asset condition profiles for roads, car parks and paths assets are shown in the graphs in Figures 1 and 2.

**Figure 1 Roads and car parks condition grades**



**Figure 2 Paths condition grades**



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.

## 2.3 Asset Remaining Lives

The remaining life of an asset generally depends on the construction materials, with variation based on usage and environment. The average expected remaining lives for roads, car parks and paths assets are shown in Tables 5 and 6.

**Table 5 Roads and car parks average expected lives**

Material	Average Expected Life - Roads & Car Parks (years)
Asphalt	39
Chipseal	14
Concrete	68
Gravel	20
Grass	n/a



**Table 6 Paths average expected lives**

Path Material	Average Expected Life (years)
Asphalt	45
Chip seal	14
Concrete	80
Gravel	25
Aggregate	75
Pavers	37
Earth/Grass/Natural	n/a

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.

## 2.4 Asset Valuation

As at 30 June 2016, the value of Parks road, carparks and path assets is shown in Table 7.

**Table 7 Asset valuation**

Description	Replacement Value (GCRC) (\$)	Annual Depreciation (\$)	Optimised Depreciated Replacement Cost (ODRC) (\$)
Roads	4,170,017	133,605	594,256
Carparks	1,906,938	67,184	20,225
Paths	3,964,227	78,411	2,378,787
<b>Total</b>	<b>10,041,182</b>	<b>279,200</b>	<b>2,993,268</b>

Values are from the 2016 statutory valuation. The data accuracy and confidence level is rated as **B - Reliable**. Internal staff conducted a detailed valuation which was peer reviewed and endorsed by Beca Consultants.

## 2.5 Operations and Maintenance Planned Operations and Maintenance

We identify scheduled maintenance requirements for roads and car parks during regular inspections. As part of the transportation roading contract, an external contractor undertakes an annual assessment of roads and prepares a schedule of planned maintenance for our operational teams.

In-house Parks staff also conduct regular inspections of walkways and paths to identify scheduled maintenance items, which are provided to the operations teams.

### Reactive Maintenance

Reactive maintenance is generally in response to customer enquiries, referrals, or complaints and is recorded through the Service Request (formerly INFRA) system. This system documents and tracks our response times to the issue. Much of the reactive maintenance is in response to potholes, cracked paths, obstructions on a roadway, impact of weather events (clearing debris and reinstating washed out areas), vandalism and graffiti removal.

### Routine Operations and Maintenance

Routine maintenance includes regular inspections of roads, car parks and paths by Parks staff, and daily servicing carried out by both staff and contractors.

### Major Maintenance

The requirement for major repairs is infrequent and is most likely to be as a result of extreme weather or storm events. The exception to this was the failure of board walk materials on the Coastal Walkway which required substantial work to resolve splintering and warping issues.

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

## 2.6 Renewals Plan

The renewals forecast for the next ten years provides for general planned renewal of roads, car parks and paths within reserve areas, based on condition assessments and prioritisation. We have included specific provision for Pukekura Park because of the park's higher usage and importance as a primary asset. The Parks operational team selects renewal sites and undertakes an annual renewal programme.

The Capex forecast for these renewals is shown in Table 8.

**Table 8 Renewals expenditure forecast**

Roads, Carparks, Paths Renewal 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
PK1012 - Pukekura Park path renewal/upgrades	38	39	39	40	41	42	43	44	45	46	417
PK1063 - Carpark upgrades	151	155	158	161	165	168	173	177	181	186	1,675
PK1021 - Walkways & Paths Renewals	101	103	105	108	110	112	115	118	121	124	1,117
PK2026 - Coastal Walkway Boardwalk Re-Siting	-	103	-	-	-	-	-	-	-	-	103
<b>Total</b>	<b>290</b>	<b>400</b>	<b>302</b>	<b>309</b>	<b>316</b>	<b>322</b>	<b>331</b>	<b>339</b>	<b>347</b>	<b>356</b>	<b>3,312</b>

## 2.7 Acquisition and Augmentation Plan

### Acquisition

No roads, car parks or paths asset acquisitions are planned during the period of the plan.

### Level of Service

The following projects are planned to meet levels of service over the period of the AMP:

- PK 1027 - An alternative route for the section of coastal walkway from Queen Street and Tisch Avenue on the seaward side of the railway line. This proposal is in response to the high cost of leasing land from Puke Ariki land Trust (Lot 1 DP 17494). The lease expires in 2020. We plan to design the wall, gain consent and install prior to lease expiry/termination in 2020. The pathway would in part traverse Railway land. The new walkway would remove the reliance on leasing 0.6 hectares of land from Puke Ariki Land Trust, which is expensive at \$192K per annum. The savings from the lease rental would cover the cost to install a new walkway within a decade.
- PK1038 – A pathway linking the Waiwhakaiho river mouth to Egmont National park. Project identified in Regional Walking and Cycling Strategy and as part of Taranaki Traverse. Template included development only. Land purchase included in preferred esplanade reserves and district plan designation templates. This will provide increased recreation opportunity in the district that has potential to attract tourists.
- PK 2001 –The grade pedestrian crossing facility at Weymouth Street could be improved by an underpass. This would remove the risk of the grade crossing of the railway line and provide a more direct route for the coastal walkway.
- PK2029 – The grass car park at Lynmouth Park has limited use, particularly in wet conditions. As an incentive to FC Western to take ownership of the Lynmouth Pavilion, sealing of the car park which is approved in the management plan, would be prioritised. An all-weather surface will improve accessibility to players and visitors to Lynmouth Park.

## 2. LIFECYCLE MANAGEMENT PLAN

- PK2033 - Mobility scooters have previously been available in Pukekura Park and the Aquatic Centre but because of concerns regarding the health and safety of users and updated legislation, they were withdrawn. A desire from the community to have improved access to Pukekura Park and the Coastal Walkway has led to a proposal being submitted from Taranaki Disabilities Information Centre Trust to partner with NPDC. This will provide greater mobility and access for those less able to access Pukekura Park and the Coastal Walkway areas.
- PK1040 - Creation of a footpath of 275m to link the entrance of Lake Rotomanu to the Clemow Road footpath opposite the Scout Den to provide safer pedestrian access.
- PK2053 – Installation of a 5km walking/jogging/cycling loop connecting Joe Gibbs Reserve / Trimble Park / Jubilee Park to provide improved fitness and exercise opportunities for Inglewood residents.
- PK2048 – Improvement to the surface of the Weld Road Car Park to meet community level of service expectations.
- PK 2007 - Continued growth in user numbers for the Mangorei Track has resulted in congestion, nuisance, pollution and safety issues from up to 40 cars at the Mangorei Road end. Some track users also create human waste at or near the road end. This project will create a safe attractive space, off road, for people to leave cars and begin their walk. Providing toilets will also minimise the nuisance and pollution issues.

The expenditure forecast for level of service projects the period of the AMP is shown in Table 9.

**Table 9 Level of service expenditure forecast**

Roads, Carparks, Paths 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
PK1027 - Alternate Coastal Walkway Partial Realignment NP Foreshore	101	104	119	1,302	-	-	-	-	-	-	1,626
PK1038 - Mountain to the Sea Walkway Development	202	206	210	215	220	-	-	-	-	-	1,053
PK2001 - Weymouth Street Railway Underpass Contribution	-	-	2,104	-	-	-	-	-	-	-	2,104
PK2029 - Lynmouth Park - Car Park Sealing	81	-	-	-	-	-	-	-	-	-	81
PK2033 - Mobility Scooters in Pukekura Park and Aquatic Centre	57	-	-	-	-	-	-	-	-	-	57
PK1040 - Clemow Road footpath extension	-	32	-	-	-	-	-	-	-	-	32
PK2053 - Trimble Park to Joe Gibbs Pathway	50	-	-	-	-	-	-	-	-	-	50
PK2048 - Weld Road Car Park	10	-	-	-	-	-	-	-	-	-	10
RD2007 - Mangorei Road End Carpark	-	926	-	-	-	-	-	-	-	-	926
<b>Total</b>	<b>501</b>	<b>1,268</b>	<b>2,433</b>	<b>1,517</b>	<b>220</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5,939</b>

# 2. LIFECYCLE MANAGEMENT PLAN

## Growth

To meet future demand and levels of service requirements we have planned the following project over the period of the AMP:

- PK1045 - Development of gravel pathways along esplanade reserves within the future growth areas of Inglewood. This template includes path development and maintenance. Land purchase is contained within template PK1102 – western side of Waiongana Stream, Eastern side of Karo Park, Eastern and Western sides of Kurapete Stream. Investment to realise the public use of the land purchase identified in PK1102.

The expenditure forecast for this growth project over the period of the AMP is shown in Table 10.

**Table 10 Growth expenditure forecast**

Roads, Carpark, Paths Growth 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
PK1045 - Future Growth INGLEWOOD - Pathway Developments	-	-	-	17	17	18	18	19	19	20	128
Total	-	-	-	17	17	18	18	19	19	20	128

## 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

Currently criticality assessments for Parks assets are informal, based on Parks team knowledge and experience. We do plan to conduct formal criticality assessments in the future and record them in EAM. **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 as part of preparing and evaluating project options.



# 4. FINANCIAL SUMMARY

A summary of the Capex forecasts included in this volume is shown in Table 11.

**Table 11 Capex forecast summary**

Roads, Carparks, Paths 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
Renewals	290	400	302	309	316	322	331	339	347	356	3,312
Service Level	501	1,268	2,433	1,517	220	-	-	-	-	-	5,939
Growth	-	-	-	17	17	18	18	19	19	20	128
<b>Total</b>	<b>791</b>	<b>1,668</b>	<b>2,735</b>	<b>1,843</b>	<b>553</b>	<b>340</b>	<b>349</b>	<b>358</b>	<b>366</b>	<b>376</b>	<b>9,379</b>

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.

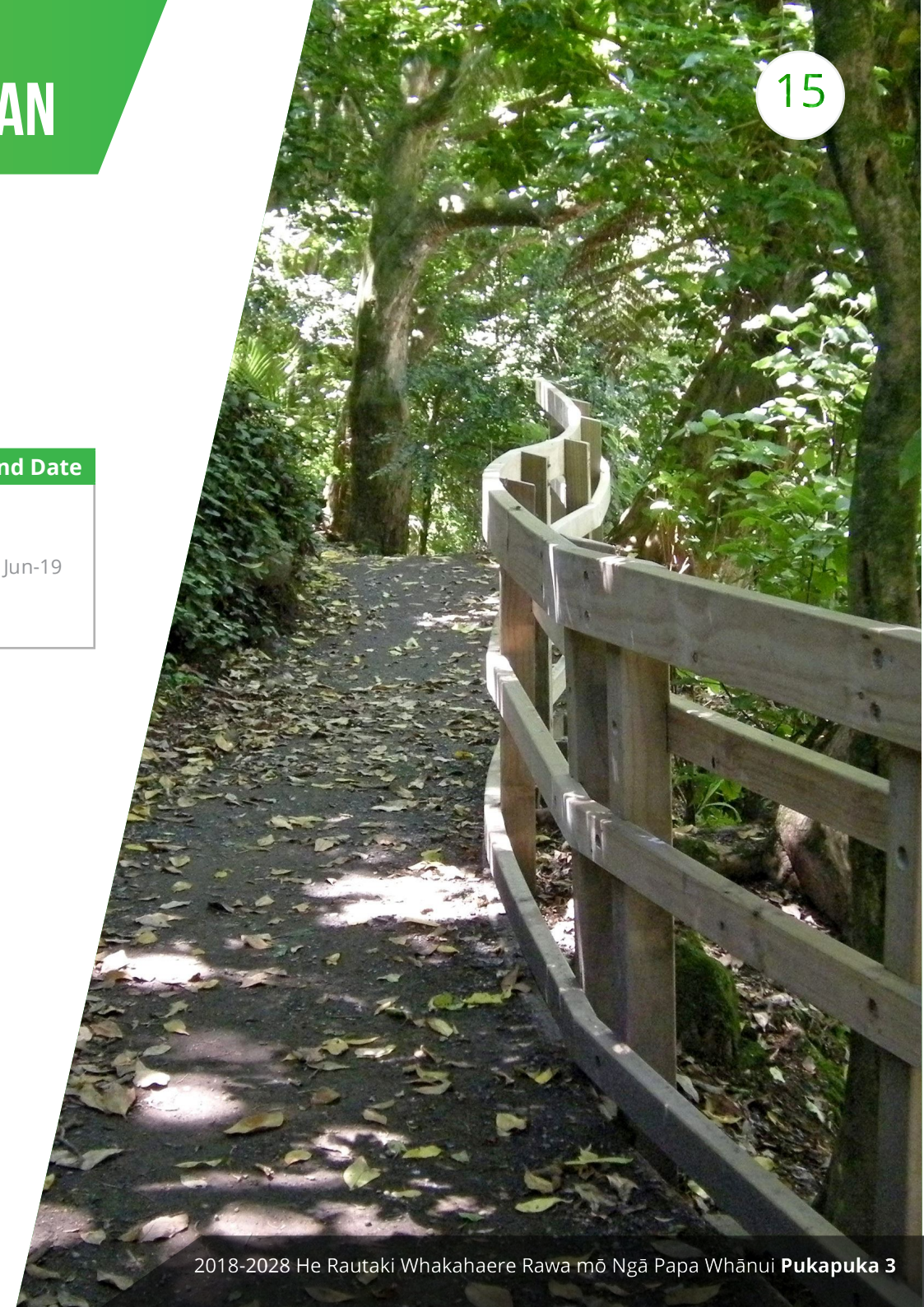
# 5. IMPROVEMENT AND MONITORING PLAN

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 12.

**Table 12 Improvements summary**

No	Improvement Area	Owner	Start Date	End Date
1	Criticality assessment of roads, car parks and paths assets has not been carried out. We plan to conduct an assessment in the future to assist inspection and maintenance planning.	Asset Operations Planning Lead	Jul-18	Jun-19



2018-2028 PARKS ASSET MANAGEMENT PLAN  
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